A STUDY OF ANXIETY LEVELS IN FEMALE PRISON OFFICERS WORKING IN DIFFERENT CONDITIONS OF SECURITY, AND FEMALE HOSTEL STAFF

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DECLARATION

Except for the above mentioned, I declare this thesis is all my own work.

Helen J. Liebling

ABSTRACT

A pilot study was carried out looking at anxiety levels in 39 female prison officers working in a female prison in Scotland and 19 female hostel staff working in two hostels in Scotland. The Spielberger State-Trait Anxiety Inventory (Spielberger et al, 1970) was used to compare trait anxiety levels in these different groups. The effects of disturbance, as measured by "number of incidents per day", and state anxiety levels in each area were recorded over a ten day period.

Prison officers working in areas of higher levels of disturbance had significantly higher, more fluctuating levels of anxiety than staff working in other areas. Anxiety measures increased in staff as incidents occurred during the day.

Contrary to the hypothesis, hostel staff in one group had significantly higher anxiety levels than prison officers working with young offender inmates.

Anxiety levels were found to be significantly greater in younger staff with less experience in all five groups.

The two groups of hostel staff had different anxiety levels, contrary to the hypothesis. Stress management sessions significantly reduced anxiety levels in one of the hostel staff groups.

The implications of this study with respect to selection, training and support of staff working in these settings, plus methodological difficulties of research in this area, are discussed. Some recommendations are made.

CONTENTS

PREFACE

"If anxiety could be controlled by biological or social means, fundamental alterations in the organisation of our civilisation would ensue and the probability of individual happiness would be greatly enhanced.... Anxiety is the most pervasive psychological phenomenon of our time...." Hoch and Zubin (1950).

There have been few British studies of anxiety levels in prison officers and hostel staff. Much of the work that has been carried out is on stress in the prison service and is American (Lindquist et al, 1986; Brodsky, 1982; Cheek & Miller, 1983). This is perhaps not applicable to our country. The present pilot study looks at anxiety levels in prison officers working in different areas of disturbance in a women's prison in Scotland. It also makes some comparisons with hostel staff working in two hostels in Scotland, which accommodate young homeless women.

LITERATURE REVIEW

I. DEFINITIONS OF STRESS

There is considerable debate among those who carry out research into stress concerning how to define the term. Various definitions are reviewed by Cox and Mackay (1981). They referred to stress as:

"the level of anxiety perceived by the individual"

It is apparent that different individuals react to situations in different ways. Definitions have been proposed which combine both perceived level of anxiety and differences in responses to similar situations by different people. One such definition is cited by Monet and Lazarus (1977) as follows:

"Stress ... consists of any event in which environmental demands, internal demands, or both, tax or exceed the adaptive resources of an individual, social system or tissue system.

Stress can be termed in two ways, acute or chronic (Farmer et al, 1984).

Acute Stress

This occurs where there is an immediate and real emergency or threat involving potential physical harm or psychological loss. Once the danger has passed an individual can return to a state of equilibrium.

Chronic Stress

This occurs over a longer period of time where an individual's adaptive resources are continually taxed. This can lead to long-term problems i.e. physiological, emotional and interpersonal.

If individuals are subjected to the long-term effects of stress in their work environment then 'burnout' can result. This term was first utilised by Freudenberger in 1974. He used it to denote a state of physical and emotional depletion resulting from the conditions of work. Maslach (1976) stated that to be burnt-out is:

"to lose all concern, all emotional feelings for the persons worked with, and to treat them in detached dehumanised ways."

The professional person's attitude and behaviour change in negative ways in response to job strain (Cherniss, 1980).

Two kinds of burnout have been identified (Pines, Aronson & Kafry, 1981), burnout that results from being 'overstressed' and burnout that occurs from feeling 'underchallenged'. Both are serious problems, particularly for social service organisation. Both are costly (Toch & Grant, 1982), debilitating to workers, and detrimental to the people served. Various theories have been put forward to explain the reasons for burnout. Details of these will not be covered by the present study. Information in this area is covered by Gerstein, Topp & Correll (1987). However,

it should be noted that the inability to control anxiety (Ferris & Bergin, 1984) has been proposed as a variable which contributes to burnout. This has implications for the present study. The concept of burnout will be discussed later with reference to prison officers.

Continual exposure to stress leads to behavioural, psychological and medical problems. Behavioural problems are the earliest signs of increased stress levels e.g. increases in smoking and alcohol intake (Russek, 1965; Conway et al, 1981). Individual stress can lead to specific psychological or psychiatric problems e.g. insomnia, depression and anxiety. It can cause headaches, backache and fatigue (Quick & Quick, 1984). Stress has been shown to speed up illnesses (Quick et al, 1987). The link of stress and coronary heart disease is well documented (Dorian & Taylor, 1984). Links have also been shown with stress, cancer and lung disease.

The link between health and stress is complicated. There is a need to account for the moderating factors of individual age, genetics, and diet, which make strong conclusions difficult (Seyle, 1976).

Stress effects go beyond the individual. There is widespread recognition that work and the way it is organised can give rise directly to stress. The costs of stress-related illnesses to employers are increasingly being counted in terms of days lost through sickness absence, accidents, poor worker morale and low productivity (Hagard, 1988).

Models of stress will not be covered by the present study. However, Sampson

(1989) reviews the literature in this area.

The present study recognises three themes which emerge from the literature on stress as a concept. These are as follows:

(i) There is no clear agreement between people who work in the area of stress research, in a precise definition of stress. This has implications for the measurement of stress and designing adequate questionnaires which will measure accurately what individuals have defined as stress.

(ii) Stress is a multifaceted phenomenon. There are possibly multiple causes, multiple mediators and multiple results.

(iii) The relationship between personal and environmental stressors and variables is complex. Models of stress are difficult to validate empirically and difficult to use in practice.

Finally, it is important to distinguish between positive and negative stressors in our lives. Stress can be positive in our lives. It can challenge the individual to be stimulated and raise his performance levels. This, in turn leads to satisfaction and increased self-esteem (Cushway, 1988).

For the purpose of the present study the negative aspects of stress will be referred to and discussed in relation to anxiety levels.

II. THE RELATIONSHIP BETWEEN STRESS AND ANXIETY

Stress is commonly used in connection with emotional states. It is often used synonymously with anxiety and Aitken (1961) has referred to stress and anxiety as "homomorphisms".

For clinical psychologists and other workers doing research in the area of stress, the term stress is used in conjunction with anxiety. In clinical practice, anxious patients are often referred to as 'under stress'. Stress is therefore a collective term used for an area of study or to describe conditions which an anxious person may be under. Hence, the present study will refer to stress as a collective term which includes the presentation of anxiety and its symptoms.

III. A BRIEF OVERVIEW OF THE THEORIES OF ANXIETY

Being anxious to a degree can be regarded as part of a natural response to everyday problems. When it becomes excessive it is regarded as a clinical problem.

Historically, Freud (1923) regarded anxiety as arising from the deprivation of psychological and physiological needs, in a young child. Neo-Freudian theorists believed anxiety arises in the social processes when a young child realises his own helplessness.

Later, learning theorists viewed anxiety as a learned drive based upon an innate tendency to avoid pain.

The most recent theory of anxiety is Beck's Cognitive Theory of Anxiety (1976) (Beck & Emery, 1985). Anxiety is viewed in this theory as arising from dysfunctions in thinking which result in inaccurate appraisals of situations.

It is clear that a more integrated approach is needed which accounts for physiological, cognitive and behavioural components of anxiety. Information in this area is adequately covered by Blackburn & Davidson (1989).

IV. TYPES OF ANXIETY

For the purposes of the present study it is useful to look at the different types of anxiety.

Acute Anxiety

This is anxiety of high intensity and short duration.

Chronic Anxiety

This is anxiety of low intensity and indefinite duration (Spielberger, 1966).

State and Trait Anxiety

The present study will examine trait and state anxiety in great detail, hence a distinction is made between these two concepts.

State Anxiety

State anxiety is sensitive to stress situations. It is a measurement of situational anxiety which occurs in response to a stimulus and varies in intensity as a function of the stimulus characterised by associated physiological reactions.

Trait Anxiety

Trait anxiety is relatively constant over time. It measures anxiety-proneness and is relatively unfluctuating in an individual and exerts a constant influence on his or her behaviour.

Spielberger (1966) found that individuals who were high on trait anxiety measures would experience state anxiety more frequently than those who were low on trait anxiety.

V. STRESS IN HUMAN SERVICE PROFESSIONALS

Due to problems in defining stress as a concept, methodological difficulties and a wide variety of human service professionals, knowledge of stress in the area is incomplete, uncomprehensive and often inconclusive. Studies often focus on objective and subjective stressors in a particular group and different coping strategies.

The present study will not cover this vast area of literature, but some relevant samples will be discussed. Readers are referred to Payne & Firth-Cozens 1987) for a more comprehensive overview of the area. Payne and Firth-Cozens (1987) stated that much of the health service worker research revolves around the term 'burnout', particularly in nursing.

Maslach (1982) views health professionals as the single occupational group involved in continuous face to face contact with individuals. This he believes is one of the most important contributions to the phenomenon of burnout. Burnout is a causative factor in poor quality of care, absenteeism, turnover, use of alcohol, drugs, insomnia and family problems (Maslach, 1979; Maslach & Pines, 1977; Pines & Maslach, 1978). There are many descriptions of burnout (Cherniss, 1980) but few studies have tested the proposed processes underlying burnout (Einsiedel & Tully, 1980). Maslach (1982) found overload was the most common stressor in health professionals and this plays a major role in the poor delivery of health services to people in need of them:

"They have to wait longer to receive less attention and less care" (Maslach, 1982).

Payne and Firth-Cozens (1987) suggest there is an extra aspect to stress - not only do health professionals witness extreme suffering, death and deformity, they are also at times the instigator of such, via necessary procedures (e.g. dentists). They also have a major responsibility for making decisions and there are possible dire consequences if mistakes are made.

In addition to the above, the health service is facing organisational change in the current economic and political climate. There are reduced resources and increases in technology requiring new skills. Also, there is the pressure of patients moving into the community and implementation of new management strategies which involve increasing accountability.

In March 1988, a report was published by the Health Education Authority based on findings of a working party looking at stress in the nursing profession, the police, social workers and teachers.

Areas which were found to be particularly stressful for all four groups are detailed with particular examples given with reference to nursing staff.

1. Stress which arises from the nature of the work and the social context in which it takes place, e.g. nurses deal with pain, death and dying. They are not expected to show their feelings, are overworked, and experience a lot of role conflict.

2. Stress which arises from organisational and management factors e.g. lack of support in the nursing profession and poor communication between staff.

3. Stress arising from characteristics which an individual brings to the job e.g. denial of stress plus the difficult home:work interface. Variations in the sources of stress depend on the type of work setting, grade and length of service and particular regional differences. The report goes on to highlight the cumulative effects of stress as follows:

1. Low worker morale

2. High sickness levels

3. High absenteeism

4. High staff turnover

5. Inefficient and ineffective delivery of service

6. Client damage.

Farmer et al (1984) have identified four common stressors of people working in the human services:

1. Working with people who are often uncooperative, hostile and disturbed.

2. 'Success' - whether someone has been cured or not can cause great insecurity in the worker.

3. Lack of self esteem which may occur due to lack of support and decisions which do not relate to the needs of a particular department.

4. The decision-making process of the organisation produces great stress. Role conflict occurs as the professional gets caught between the client's needs and organisational demands. These identified stressors certainly have implications for the two groups used in the present study (prison officers and hostel staff).

Research data on stress is fraught with methodological difficulties (Burke, 1987). Determining the extent of occupational stress in empirical terms is often inconsistent as adequate data on sickness turnover, and absenteeism cannot be relied on. However, there have been a few large-scale studies in the UK on occupational stress in nursing staff which have acquired reliable data. Birch (1979) measured stress levels in 207 student nurses at eight month intervals during their two years training. He found 43% of nurses indicated 'borderline anxiety levels' during their introductory course, and 36% showed definite 'psychological morbidity'. These levels did not decline after two years training.

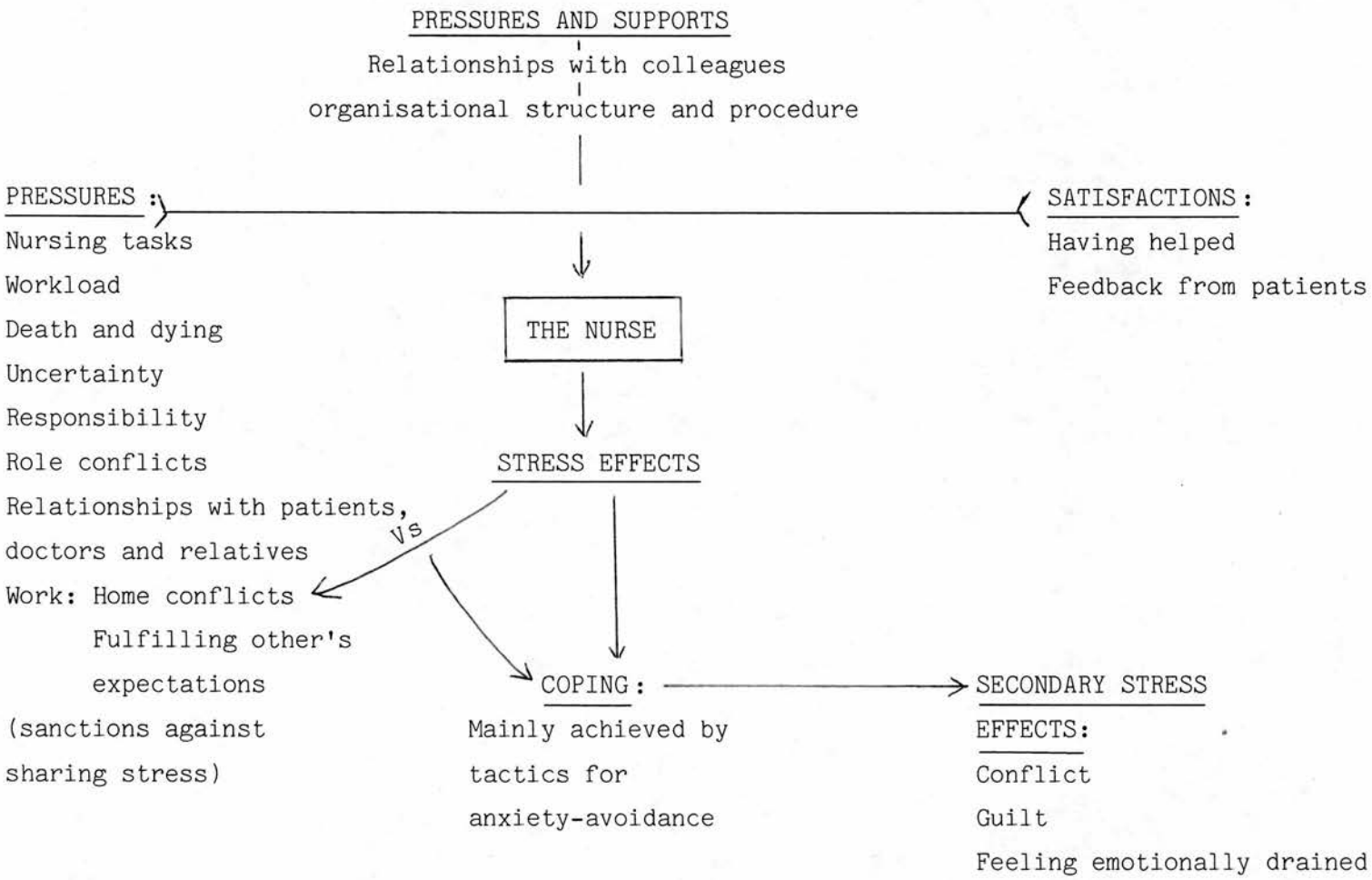
Other studies with nursing staff have shown high levels of alcohol consumption (Booth, 1985), high levels of smoking, which have remained high contrary to the pattern in women generally, (Hingley & Cooper, 1986) and abnormally high rates of suicide in nurse managers (Hingley and Cooper, 1986). Absence rates for student nurses were also found to be double the rate for other women of similar age in other occupations (Lunn, 1975). Drop-out rates for registered nurses were found to be 35% and for enrolled nurses 30% (Judge, 1985).

Lee (1987) has described the vast amounts of stress research in relation to the nursing profession. Stressors include patients' demands, death and role ambiguity, similar to stressors found in medical staff (Firth-Cozens, 1987). However, other stressors identified were shift-work, work overload and dealing with doctors. There is a lot of research into which areas are more stressful with no consensus of opinion (Gentry & Parkes, 1982).

Marshall (1980) reviewed the literature on stress in the nursing profession and stated that nurses cannot be regarded as a homogeneous group. There are different stressors for different nurse types, ward types and hospital specialties. Psychiatric nurses also have a very different role to general nurses and very different goals for patients (Powell, 1982). Marshall (1980) summarises the stresses on nurses as an interaction of many elements. These can be viewed diagrammatically on page 13.

THE MAIN ELEMENTS IN STRESS FOR THE NURSE

Judi Marshall (1980)



She identifies the many pressures on nurses, and says they can be viewed as primary task aspects e.g. giving out medication to a dying patient, or secondary effects, which result from the mainly avoidance-based coping strategies nurses adopt. Certain pressures on nurses e.g. work overload and responsibility, accentuate the effects of other pressures. Other aspects affecting the nurse are more positive satisfactions e.g. positive feedback from patients, which help to balance and alleviate stress.

The reason for presenting this model is that it could be equally adapted to apply to prison officers and hostel staff, as used in the present study. One difference might be apparent, particularly in prison officers, that is the lack of positive satisfactions. Prison officers generally get little 'positive' feedback from inmates, hence it may be more difficult for prison officers to balance and alleviate stress.

Research studies have also illustrated the drastic effects of stress on the police force. Studies have quoted three-quarters of heart-attacks suffered by US policy are stress-related (Washington, 1975). 30% of officers have been divorced, compared to an average rate of 13.8% (Baxter, 1978). Halford (1987) quoted a figure of 22.3 average sick days per officer per annum, which is the highest in the country. Stress is believed to be a causative factor.

For further details of specific professionals readers are referred to 'Stress in Health Professionals' edited by Payne & Firth-Cozens (1987).

SUMMARY OF STRESS IN HUMAN SERVICE PROFESSIONALS

Payne et al (1987) summarised the research on stress in health professions. They suggest there appears to be a common core of stressors for health professionals due to the interdependent nature of the job. However, certain stressors are possibly more potent for certain groups e.g. psychiatrists are more at risk of physical threat. The most common stressor according to Maslach (1982) is 'overload', which plays a significant role in contributing to 'burnout'.

There is great variability and complexity involved in the understanding of job stressors. More research in the area is needed and further work should take account of individual differences (Cooper et al, 1970).

VI. STRESS IN THE PRISON SERVICE

The current crisis situation in the prison service and recent events in British prisons has caused serious concern with the stressfulness of the job of the prison officer. Severe overcrowding of some prison facilities has occurred as a result of longer prison sentences, plus the presence of more violent offenders and many mentally ill inmates, often undiagnosed and untreated, has placed heavy pressures upon the prison officer. Resulting officer stress and burnout has led to increases in organisational costs due to high rates of absenteeism and turnover. Additionally, impaired job performance in terms of passivity, disinterest, negativity, and displaced hostility has threatened custodial control with increasing frequency of violent incidents. Hence, a strong interest has developed in examining officer stress, it's

nature causes and consequences, and how it may be relieved (Cheek & Miller, 1983).

There is a diverse quality and methodology in the limited literature in this area. Many of the findings are inconsistent and, as most of the work is based on the American correctional system and male prison officers, hence the sources and effects identified do not necessarily relate to the British female prison officer experience. However, there are a few American studies worth discussing which do not just use simple objective and subjective measures of stress (Cheek & Miller, 1983; Mobley, 1985; Poole et al, 1980; Brodsky, 1982). Although there are only a few British studies these are discussed with more relevance to the present study.

Until recently little attention has been paid to the stress involved in this demanding role, professional publications and research has focused primarily upon the stress of police officers (Cheek & Miller, 1983). However, the studies by Cheek and Miller in this area have found that some of the highest morbidity rates are in prison and police officers:

"Stress in correction officers is similarly high or indeed higher than police officers with a high incidence of heart disease, psychological problems and absenteeism." Cheek & Miller (1983).

Long et al (1986) found that poor health in officers could be strongly predicted by poor relations with inmates and staff, long working hours and difficulties with promotion. Role conflict and role ambiguity have certainly been shown to be important in the causation of officer stress (Cooper et al, 1982; Topp

& Carrell, 1987; Kahn & Frend, 1970; Kroes, 1985; Shamir & Drory, 1982; Smith, 1985). Factors which are also important are those which are intrinsic to the job e.g. pressure of work and long hours (Cheek & Miller, 1983; Long & Vogues, 1987), and the violent nature of the job (Long & Vogues, 1987). This latter conclusion was not supported by a British study by Smith in 1985. He examined stress in several British prison officers, male and female and showed the most stressful factors perceived by officers were organisational demands and constraints. Surprisingly, handling violent or special inmates was not perceived as very stressful. Smith (1985) also showed officers scored more highly on factors associated with fatigue and tiredness than a normal working population. However, they had a considerably lower score for the factor associated with feelings, tension, agitation and anxiety. He also found that perceived stress was independent of the type of prison suggesting organisational demands and constraints are uniform across the prison service.

A recent study by Rutter and Fielding (1988) also found one of the major sources of occupational stress in British male prison officers was lack of staff. Another stressful area of their work was the confrontation with inmates. Other aspects of occupational stressors of prison officers in the American literature is the inability to see positive results from their work, a negative job stigma, lack of administrative support and low staff morale (Cheek & Miller, 1982, 1983). Divorce rates were high and health problems occurred in officers who were highly stressed. This suggested that occupational stress was carried home destructively and is consistent with the work on police officers already cited (Baxter, 1978). Prison officers in Cheek and Miller's studies perceived high rates of physical and

emotional problems, alcoholism and drug abuse and family problems in their fellow workers. Officers they found tended to present a tough 'macho-image' denying stress in themselves but willing to report stress-related problems in fellow workers.

This is consistent of the 'denial' prison officers use as a way of coping with stress. Cheek and Miller (1983) describe the behaviour as typical of the 'John Wayne Syndrome' (Mobley, 1985). It may be part of the psychology of admitting no weakness in a hostile environment. It may also reflect societies' reliance on denial to avoid coming to grips with some of the critical issues in the goals and practices of prisons. Denial sets up conflicts from which stress emanates and it prevents the individual from acknowledging the stress. Many workers in this area have suggested that the increasing stress in officers is not due to more difficult inmates but the changing goals of the prison system e.g. the conflict between the reformative and custodial aims of imprisonment also added to the confusion of feeling in society (Thomas, 1974; Lomardo, 1981; 1986; Lippold, 1978; Cheek and Miller, 1982; Poole et al, 1980; Brodsky, 1982).

Poole et al (1980) have shown that the day to day requirements of 'a friendly' relationship between officer and inmate, whilst remaining alert to potential danger, becomes a source of chronic stress. They also showed a tendency of prison officers to shift to increased custodial surveillance under experiences of stress. Prison officer and inmate interactions are a major source of stress and the administrative malfunctions place them in a double-bind situation in relation to rule enforcement. Powerlessness is rendered especially stressful by the 'macho' working personality which the job requires of them.

Hence, the sources of stress in the prison officer cannot be pinned solely to the characteristics of the individual employees alone but should also be viewed as part of the structure and culture of the prison environment and its role in society (Brodsky, 1982). Cheek and Miller (1983) have summarised the primary sources of stress in the prison officer. These include:

1. The conflicting goals of custody and rehabilitation.

2. The predominance of trial and error management due to lack of training and education of managers.

3. The system's vulnerability to political and community pressure groups. These sources of stress add to the double-bind situation of officers needing to balance their role between 'too loose' and 'too tight' which is compounded by administrative reluctance to support officers in their disciplinary efforts due to fear of litigation.

There are many conflicts which are peculiar to the prison service and its staff. Perhaps the main conflict is that of custody or rehabilitation. Officers are employed and trained for their custodial and disciplinarian role. At the same time, they are expected to be 'case-officers', empathic and sensitive to an individual inmate's needs, for which they receive little training. They also have to balance the needs of the inmate against the needs of the public who want them punished (Cheek & Miller, 1983).

Burnout has been discussed with reference to other professional groups (Maslach & Pines, 1979). It is a term which is frequently used with prison officers who are under frequent stress. A British study by Smith (1984) found when prison officers were under stress they took short-term absence, started going by the book, denied the existence of a problem and took it out on their family. Toch and Klofas (1982) in their American study showed that prison officers who had worked longer were less likely to feel burnt out as they developed a comfortable social distance with inmate. It will be interesting to see if this is the case with the present sample. Negative interactions with inmates have been found to increase the chances of officer burnout (Gerstein et al, 1987). If prison officers believe they cannot change an inmate's behaviour and believe an inmate is unmotivated to change, they will feel exhausted, helpless and lacking in self-satisfaction. This is consistent with Farmer et al's (1984) proposal that definition of success can cause great insecurity in health professionals.

Posen (1985) conducted one of the only studies on stress in female prison officers in Britain at Holloway Prison. This is most relevant to the present study. She found that living in close proximity to the prison was the greatest source of stress for staff along with staffing problems at work rather than dealing with inmates. There were also problems with an overcritical style of management, lack of choice in unit location and combining home life with unsociable work hours. Female prison officers commonly reported physiological symptoms associated with stress e.g. headaches (56%) and muscle tension (54%) consistent with other research on health professionals (Hingley & Cooper, 1986). Posen (1985) found a high incidence of smoking in the staff at Holloway. This was above the national

average. Finally, staff in Posen's study reported lack of interest in work (73%), tension (66%), irritability (60%) and long periods of tiredness (50%).

SUMMARY

The research on stress in the prison service is mainly American, conducted on male officers, and does not necessarily relate to the British experience of the female prison officer group. However, together with a few British studies the literature suggests that stress in prison officers is different to that in other professional groups. Long-term results of stress in the prison service leads to ill-health, and eventually burnout. The source of stress in this group lies in the inherent conflict of all penal systems with the dual aim of secure and humane containment added to the intrinsic factors of the job (Smith, 1985; Brodsky, 1982).

VII. RESEARCH ON HOSTEL STAFF

There is little relevant literature in relation to hostel staff and the present study. A study was carried out by Whitfield (1986) looking at the experiences of probation hostel staff. He concluded that young inexperienced staff members were frequently left to cope alone for up to 12 hour shifts. The hostels contained a volatile mix of residents and violence was usually well contained. Whitfield recommended that staff in such hostels should receive more adequate training for the job and be more confident at dealing with violent situations. This study is cited for later comparisons with the two groups of hostel staff used in the present study.

VIII. CONCLUSIONS

Increasing evidence shows that people working in prison settings experience a significant amount of stress in their jobs as in human service professionals. In some places they take high rates of sick leave, some officers report feeling anxious and depressed, have troubled relations with inmates, staff and management, they frequently develop stressed marital relations and often retire early on medical disability (Brodsky, 1977). It is interesting to note that the bulk of the literature in this area deals with male prison officers working in male prisons. Apart from a study by Posen (1985) at HMP Holloway, there has been little interest shown in the levels of stress in female prison officers.

The present pilot study investigates the level of anxiety of female prison officers working in a women's prison in Scotland. It looks at the particular effects on staff of 'incidents'; working in different levels of security and working with adult or young offender inmates.

A further comparison is made with female hostel staff working with young homeless women of a similar age group to the young offender inmate population.

PRESENT STUDY

I. AIMS OF THE RESEARCH

The aims of the present study were to test the following hypotheses;

1. Female prison officers working in areas with greater behavioural disturbance, as measured by number of incidents, experience higher levels of anxiety than those working elsewhere.

2. Prison officers working with young offender inmates will show higher levels of anxiety than those staff working in the hostels.

3. Measures of anxiety will increase in all staff as incidents occur during the day.

4. Anxiety levels will fluctuate more widely in areas with greater behavioural disturbance.

5. Anxiety levels will be significantly greater in younger staff and staff with less experience.

6. Anxiety levels in the two hostels will be similar.

7. Stress management sessions will significantly reduce the level of trait anxiety in Hostel A staff.

* Anxiety was measured by the Spielberger State-Trait Anxiety Inventory, Charles D. Spielberger et al (1970).

II. METHOD

The study was carried out at two female hostels and the women's prison in Scotland. The latter establishment is a modern, purpose-built institution, and there is very little overcrowding. It provides a young offenders' institution for 16-21 year olds, remand facilities for adults and young offenders, and a prison taking both short and long term adult women. Staff and inmates are housed in separate blocks. Each block is organised into units with seven inmates in each. Every woman has her own room plus access to a sitting-room, kitchen and bathing facilities. The different degrees of freedom allowed to the women depends both on the staff assessment of them and the design of the buildings in which they are housed.

Prison officers who took part in the study ranged from Auxiliary Officer to Principal Officer. All staff were invited to take part, and in total 39 out of 186 officers completed all the questionnaires.

The two hostels took homeless women aged 16 to 21 years old, who were comparable in age to the young offenders in the prison. All hostel staff took part in the study making a total of 19 and a grand total of 58 staff.

(i) SUBJECTS

Five groups of staff took part in the study. This included three groups of female prison officers and two groups of female hostel staff as detailed below:

(1) Group 1

This group comprised prison officers working in units of accommodation where there are high levels of disturbance, as measured by the number of "incidents" per day. These units make up the secure block which houses adult prisoners who are more likely to require constant observation (15 staff).

(2) Group 2

This group comprised prison officers working in units of accommodation in a secure block which houses young offenders. In these units there are also high levels of disturbance.

(3) Group 3

This group comprised prison officers working in units of accommodation where there is little or no disturbance. These units house convicted women over the age of 21 years old, who are generally expected to require less supervision (12 staff).

(4) Group 4 : Hostel A

This group comprised hostel staff working with young homeless women between the ages of 16 and 21 years old. These women are of comparable age to the young offender population in the prison and show some behavioural disturbance.

Hostel A differs from Hostel B by being enclosed in one converted old house. All staff and women are concentrated in one area. The women share bedrooms but have considerably more freedom than the inmate population (9 staff).

(5) Group 5 : Hostel B

This group comprised hostel staff working with young homeless women as described for Hostel A. Hostel B differs from Hostel A by being situated in two areas of converted flats where staff and women are concentrated. There is more space for movement for staff and women in Hostel B, although the women still share bedrooms. Details of all the staff are summarised in the table below;

Table illustrating Personal Data for all 5 Groups

Group	Number of staff	Age range	Mean age	Standard Deviation
1	15	26-50	32.87	5.76
2	12	23-47	34.17	8.31
3	12	25-52	31.83	5.36
4	9	20-49	32.11	9.35
5	10	21-53	32.10	9.77
5	58	21-53		

(ii) MEASURES

(1) Diagnostic measures

All subjects were assessed on measures of severity of anxiety using the Spielberger State-Trait Anxiety Inventory (STAI) (Spielberger et al. 1970). These scales measure state anxiety and trait anxiety. Trait anxiety is theoretically a constant condition of the individual, it should not fluctuate in response to circumstances. It is advantageous for this study to be able to measure either situational anxiety or anxiety-proneness with the same instrument.

The STAI is available in several forms; the tests' constructors recommend Form B for clinical use. It consists of twenty self-descriptive statements to which the subject responds on a 5-point scale of intensity of the feeling, condition or experience. The subject can be instructed to respond so as to indicate how he feels 'right now', or how he 'generally' feels, or both. Items are identical for determining either trait or state anxiety, only the instructions vary. A copy of the STAI is included in Appendix I.

The STAI was chosen for the study as it has been developed carefully, both theoretically and methodologically. Levitt (1971) viewed it as the most useful experimental measurement of anxiety. The test construction procedures by Spielberger and Gorsuch (1966) are regarded as thorough. Spielberger (1966) has described the theoretical background for the test and states that "trait anxiety measures are stable and consistent over time. However, the measures of state

anxiety should be sensitive to stress situations". It has also been illustrated that measures of state anxiety under stress increase and that these increases correlate with trait scores for a given group of respondents. The validating data on the STAI presented by Spielberger and Gorsuch (1966) are concurrent with their theoretical conception. A shortcoming of their work is that it has been carried out entirely with American college student groups. However, this is true for most of the experimental measurements of anxiety it is noted because it is the only flaw in an otherwise impressive test construction process.

Hence, the STAI was used because of its provision for scaling the intensity of responses, its brevity and the relative simplicity of the vocabulary used (Hall, 1976).

Reliability studies have shown the inventory to have a high internal consistency for both state and trait anxiety and stability is high for trait anxiety (Spielberger et al, 1966). It has low retest coefficients which suggest sensitivity to change in state, whilst validity studies have upheld the scales' ability to reflect changes in anxiety state under different conditions.

Concurrent validity has been shown with other scales, e.g. the Zuckerman Affect Adjective Check List (AACL) (Zuckerman, 1960). However, normative data for this test has again been collected from large samples of college students in America. Normative data for the STAI on comparative British samples is lacking. Normative data is however available for adults, military personnel, psychiatric, medical, surgical and dental patients in America.

The population norms used for the present study were obtained by Spielberger et al (1970) on 451 females working at the Federal Aviation Administration. The sample they used were quite heterogeneous with regard to educational level and age. The employees' administrative responsibility ranged from clerical positions to high levels of supervisory management. The subjects' scores on the STAI was 36.17 $\pm$ 10.52 for state anxiety and 36.15 $\pm$ 9.53 for trait anxiety, for the 451 females with ages ranging from 19 to 39 years of age.

The second set of norms were collected by Dr I.M. Blackburn et al (1986) on a British sample of 31 subjects. These subjects had no previous psychiatric contact. Of these, 20 were assessed in an orthopaedic ward where they had been admitted for surgery or diagnostic tests and 11 were volunteers from the hospital staff. There were 10 males and 21 females, mean age 45.9 years (standard deviation 12.6, range 19-64). It is worth noting that norms used were older than the sample and one might expect their score on the STAI of 29.4 (standard deviation 6.4) to be higher than expected due to pre-operative anxiety of some of the sample. The control sample was also relatively small.

Other measures used:

(ii) Incident forms (included in appendix)

These were used by prison and hostel staff to rate the number of incidents which occurred daily. The incidents recorded were listed under the following

subheadings:

(1) PRN medication

Includes medication which was given 'as required' due to disruptive behaviours which could not be contained. The staff member in charge at that time recorded it.

2) Seclusion

This was recorded if it had to be used as a result of an occurrence of one of the following incidents i.e. physical/verbal aggression, self-injury, temper tantrums or destruction of property, and where all methods of restraint had failed. Seclusion was recorded as number of times that it was used per day rather than the length of time spent in seclusion.

(3) Physical aggression to others

This included punches, kicks, strikes, slaps, throttling, using weapons against others, throwing objects at another person, spitting, pushing, scratching, using threatening gestures and pulling hair or clothes. Each separate incident was recorded for each inmate.

(4) Verbal aggression to others

This included using hostile language, name calling, swearing and cursing, yelling or screaming threats of violence and suggestion of physical violence.

(5) Self-injury

This included biting or cutting self, slapping or hitting self, banging head or other parts of the body against walls, pulling own hair, scratching or picking self, soiling or smearing self and poking objects in eyes, ears, nose or mouth etc.

(6) Temper tantrums

This included crying and screaming, stamping feet while banging objects, stamping feet while screaming or yelling and throwing self on floor while screaming or yelling.

(7) Destruction of property

This included ripping, tearing or chewing clothing, soiling own property, tearing up own magazines, books or other possessions, breaking windows, stuffing the toilet with paper or soiled objects, attempting to set fires, ripping other's clothes and soiling other's property.

These incidents were recorded daily as shown in the appendix. The staff member in charge at the end of the day filled the appropriate incidents in and the score was totalled for each day in that particular block or hostel.

(iii) Personal data

All staff members filled in a personal data questionnaire. The information was collected by interview from the two hostels whereas prison staff filled the questionnaires in during their own time. The personal data questionnaire included the following items (Appendix III): age, marital status, children, ages of the children, living situation, position at work, length of time in the present environment, sick days and illnesses over the previous year, smoking, drinking and sleep problems, whether staff enjoyed their work, what was stressful about their work, and why.

These forms were collated and evaluated. A summary of part of the personal data can be found in the subjects section, and the rest of the information is included in Appendices IV and V.

(iv) Stress management course evaluation

During the study, hostel staff from Hostel A requested some stress management sessions. Following collection of the research data, a stress management course was carried out in the hostel. Details of the course can be found in Appendix VI.

The course was evaluated by the following means:

(a) Trait anxiety scores were measured using the Spielberger State-Trait Anxiety Inventory (1970), before the stress management course and one month after completion of the course.

(b) A stress management course evaluation questionnaire designed by the author was completed by the staff. Details of this can also be found in Appendix VII.

(iii) PROCEDURE

Five groups of subjects took part in the study, 58 subjects in total. There were three groups of prison officers and two groups of hostel staff. All staff who took part in the study were female. Subjects completed the trait version of the Spielberger State-Trait Anxiety Inventory. They were asked to complete it at the beginning of the study "describing how they generally felt". Subjects also completed the state version of the STAI on ten consecutive working days. They were instructed to complete the questionnaire by describing "how they felt right now" to give a measure of State Anxiety over time, in different circumstances. They were asked to complete the questionnaires on two occasions during their working day as follows:

a) just after they came on duty, and

b) just before they went off duty.

In addition to the above, the staff member in charge recorded the number and

type of incidents which had occurred during that time. Staff at the prison completed the Personal Data questionnaire before commencing the study. The hostel staff were interviewed, before the study commenced, to collect their personal data information.

Hostel A staff requested stress management sessions during the study. Following collection of the research data, a stress management course was carried out in Hostel A. This involved nine hostel staff and three psychologists. Details of the course are included in the Appendix VI. Before the stress management course, trait anxiety measures were taken using the STAI. Staff also completed the STAI one month following completion of the course, to give a comparison trait anxiety score. This was carried out to evaluate the effectiveness of the stress management course. Hostel A staff also completed an evaluation form designed by the author, to gain additional information about the course. Details of the evaluation form and the feedback from hostel staff are included in Appendix VIII.

RESULTS

I. PERSONAL DATA

The personal data questionnaire and responses of all five groups are included in the appendix. It is interesting to note the most frequent responses for each group.

Group 1 "Staff working with adult offenders in a secure block".

Sixty per cent of Group 1 had trouble getting to sleep at night. The most stressful aspects of their job were seen as difficult staff relationships, disturbed inmates, attempted suicides and self-injurious behaviour. They enjoyed their work because of the challenge it offered (60%) and they least enjoyed their work because of difficult staff relationships (Table I).

TABLE I Most stressful aspects of the job - Group 1

Stressful aspects of the job	Percentage response
Dealing with disturbed inmates	53.3%
Difficult staff relationships	40%
Attempted suicides	33.3%
Self-injurious behaviour	26.6%

Group 2 "Staff working with young offenders in a secure block".

Sixty-seven per cent of Group 2 had trouble getting to sleep at night. 75% of the staff felt that dealing with disturbed inmates was the most stressful part of their job. 50% of staff felt that dealing with self-injurious behaviour was the most stressful. Staff mainly enjoyed their work because they were helping others (53.3%) and the challenge (50%). Staff least enjoyed dealing with self-injurious behaviour (58.3%) and cleaning dirty cells (41.6%) (Table II).

TABLE II Most stressful aspects of the job

Stressful aspects of the job	Percentage response
Dealing with disturbed inmates	75%
Self-injurious behaviour	50%
Attempted suicides	16%
Alcohol/drug withdrawal	16%

Group 3 "Staff working with adult offenders in a less secure block".

41.6% of staff in Group 3 had trouble getting to sleep at night. 66.6% of staff found difficult staff relationships most stressful. They enjoyed helping others (75%) and least enjoyed dealing with difficult staff relationships (75%) (Table III).

TABLE III Most stressful aspects of the job - Group 3

Stressful aspects of the job	Percentage response
Difficult staff relationships	66.6%
Paperwork	33.3%
Disturbed inmates	16%

Group 4 "Hostel staff working with young homeless women".

66.6% had trouble sleeping at night. They found the most stressful part of the job, lack of staff support (66.6%). They mainly enjoyed helping others (77.7%) and least enjoyed not being able to discuss incidents with other staff members (77.7%) and low morale in staff (66.6%) (Table IV).

TABLE IV Most stressful aspects of the job - Group 4

Stressful aspects of the job	Percentage response
lack of staff support	66.6%
Being on your own when an incident occurs	44.4%
Conflict between rules and therapy	44.4%
Coping with disturbed residents/families	44.4%

Group 5 "Hostel staff working with young homeless women".

Forty per cent of Group 5 had trouble getting to sleep. They reported the most stressful aspects of the job as being verbal aggression from the residents and lack of staff support. They enjoyed helping others (60%) and least enjoyed violence (40%), confrontation with residents (30%) and low morale in staff (Table V).

TABLE V Most stressful aspects of the job - Group 5

Stressful aspects of the job	Percentage response
Verbal aggression	40%
Lack of staff support	30%
Coping with disturbed residents/families	30%
Conflict between rules and therapy	20%

NB. Individual respondents to the questionnaire responded more frequently than once, hence total percentages are greater than 100%.

II. PERSONAL DATA AND TRAIT ANXIETY

A comparison of level of smoking, drinking and marital status was made between all five groups using a chi square test. Differences in trait anxiety between all groups was then tested using the analysis of variance test.

A) Comparing all 5 groups - Personal data

No significant difference was found between the five groups in smoking, drinking and marital status using a chi square test (Table VI).

TABLE VI Results of a chi square analysis of drinking, smoking and marital status for all 5 groups

Personal Data	Frequency		X	df	Significance	
Marital status	Married 18	Single 40	1.128	4	p=.8897	NS
Smoking yes/no	Yes 35	No 23	6.81	4	p=0.146	NS
Drinking Yes/no	Yes 50	No 8	6.51	4	p=0.164	NS

NS = Not Significant

B) Trait Anxiety

Trait anxiety scores were analysed for all five groups using an analysis of variance test. The mean trait anxiety scores for all five groups are illustrated by a histogram (Figure 1).

Mean Trait Anxiety Scores for Prison Officers
(grps 1,2,3) and Hostel Staff (grps 4,5)

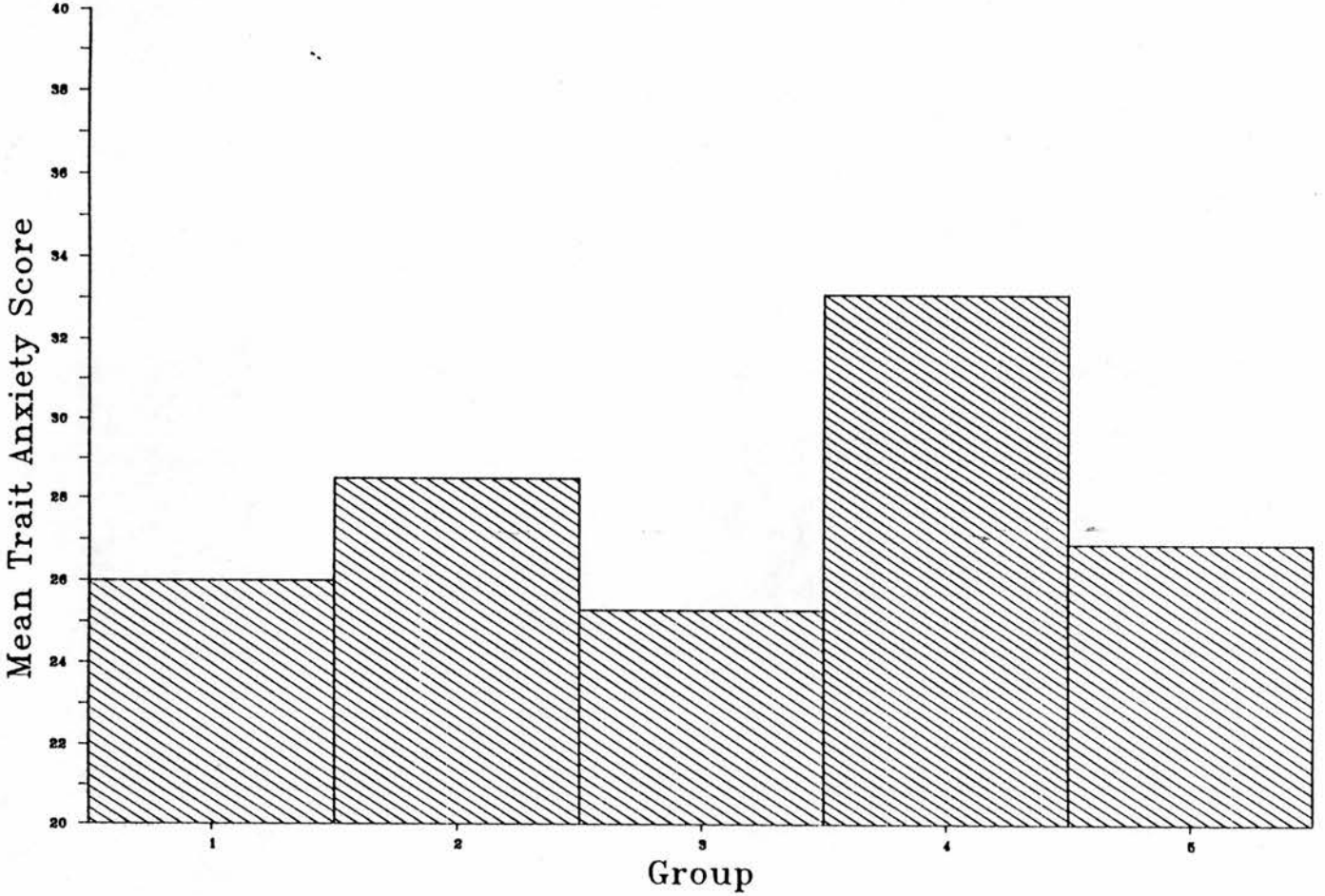


FIGURE I

A significant difference was found between the five groups in Trait Anxiety scores (F = 6.41 , p<.001) (Table VII) and for time served (F=.0029, p.05). Further analysis was carried out suing the Honestly Significant Difference Test, H.S.D. This test illustrates which group is significantly higher than the others. It was found that Group 4, Hostel A, was significantly higher in trait anxiety than all the other groups. Group 2 was significantly higher than Groups 1, 3 and 5 but not Group 4 (Table VIII).

TABLE VII Personal data analysed using analysis of variance for all five groups

Personal Data	Range	df	F	Sig of F
Trait anxiety	20 - 38	4	6.41	.0003 P<.001
Age	20 - 53	4	0.179	.948 NS
Time served	4 - 24	4	4.592	.0029 p.05
Days off sick	0 - 77	4	0.358	.838 NS

Trait Anxiety Score = Trait Anxiety

Time employed at the prison/hostel in months = time served

Days off sick in the last twelve months = days off sick.

TABLE VIII Honestly Significant Test on mean trait anxiety scores for all 5 groups

Mean trait anxiety scores for all groups					
	26.0	28.5	25.3	33.1	26.9
1. 26.0	-	2.5	0.667	7.11	0.9
2. 28.5		-	3.117	4.611	1.6
3. 25.3			-	7.778	1.567
4. 33.1				-	4.211
5. 26.9					-

This test illustrates the group which are significantly highest in trait anxiety scores. Initially the different scores between the means are found and these are compared with the value q 0.05 and q 0.01 to test their significance. For this test the values for q are as follows:

q 0.05 = 3.94 - 4.04 HSD = 2.05

q 0.01 = 4.82 - 4.93 HSD = 2.49

This shows that Group 4 is significantly higher than the other four groups ($p<.01$). Hostel staff working in Hostel A have significantly higher trait anxiety levels than staff in Hostel B and all the prison officers. Group 2 was shown to be significantly

higher than groups 1 and 3 but not 4 and 5 ($p<.01$). Hence, prison officers working with young offenders have a significantly higher level of anxiety than prison staff working with adult offenders.

There was no significant difference between the 5 groups in age ($F(.179)$, $p=0.95$, NS) or days off sick ($F(.36)$, $p=.84$, NS).

There was a significant difference in length of time served between the 5 groups ($p<.05$, $F=.003$). Further analysis using the HSD test illustrated that Groups 1 and 3 had served significantly longer than Groups 2 and 4. Therefore, the prison staff working with adult offenders in the secure block and prison officers working with adult offenders in the less secure block had worked significantly longer than prison officers in the block for young offenders and Hostel A staff (Table IX).

TABLE IX The Honestly Significant Test for mean time served for all 5 groups

Mean time served for all 5 groups (months)					
Gp	103.8	69.9167	103.083	24.111	93.0
1. 103.8	-	3.88	0.717	79.69	10.8
2. 69.9167		-	33.17	45.81	23.08
3. 103.083			-		10.08
4. 24.111				-	68.89
5. 93.0					-

As for the previous HSD test q values were obtained as follows:

HSD q 0.05 = 26.23

HSD q 0.01 = 31.89

Groups 1 and 3 were significantly higher than groups 2 and 4 ($p<.01$) as explained above.

For more information regarding the usage of the HSD test see Runyan and Haber (1980).

C) Comparison of Prison Officers and Hostel Staff

Following the analysis of personal data and trait anxiety in the five groups, some differences were noted. It was therefore interesting to look at specific differences between staff working in the prison environment and staff working in the hostels. Personal data and trait anxiety were compared between these two groups.

Initially, personal data was analysed using a chi square test. No significant difference was found between prison officers and hostel staff in drinking or marital status (Table X).

TABLE X A chi-square analysis on marital status, smoking and drinking in prison officers and hostel staff

Personal data	x^2	df	Significance
Marital status	0.058	1	0.81 NS
Smoking	5.14	1	0.02 $p<.05$
Drinking	0.0009	1	0.92 NS

The relationship between drinking, smoking and anxiety was looked at. As illustrated in Table X, significantly more prison officers smoked than hostel staff X^2 = 5.1 $p<.05$). However, hostel staff were shown to be significantly more anxious than prison officers using analysis of variance ($F=7.31$ $p<.01$). There was no significant difference between the two staff groups in age of number of days off sick. It was also illustrated that prison officers had served significantly longer than hostel staff ($F=0.03$, $p<.05$) (Table XI).

TABLE XI Analysis of personal data using analysis of variance for prison officers and hostel staff

Personal data	df	F	Sig of F
Trait anxiety	1	7.31	0.009 p<.05
Age	1	0.163	0.688 NS
Time served	1	4.71	0.03 p<.05
Days of sick	1	0.31	0.58 NS

D) Comparison of Trait Anxiety Scores with the Normative Value

The individual groups in the present study were compared with a normative value obtained by Spielberger et al (1970) of 36.15 $\pm$ 9.53. This mean trait anxiety score was obtained on a sample of 451 females, of all grades working for Federal Aviation Administration.

The Student's t-test was used with each group and the results are illustrated in Table XII below.

Table XII Comparison of Trait Anxiety Scores with the Normative value, 36.15 + 9.53, Spielberger et al. (1970)

Groups	Mean	SD	Results of t-tests
1	26	2.65	$t = 14.85$; $df - 14$; $p < .001$
2	28.5	4.66	$t = 5.68$; $df = 11$; $p < .001$
3	25.3	4.81	$t = 7.81$; $df = 11$; $p < .001$
4	33.1	3.89	$t = 2.34$; $df = 8$; $p < .05$
5	26.9	3.14	$t = 9.30$; $df = 9$; $p < .001$

For all five groups, trait anxiety measures were significantly lower than the mean value obtained by Spielberger et al. (1970).

E) Variation of Trait Anxiety keeping Length of Time served a Constant

As there was a significant difference between five groups in trait anxiety this was analysed further to attempt to explain the differences. Analysis of variance keeping time served constant was used and a significant difference was still obtained between trait anxiety scores for the five groups ($F=.05$, $p<.05$). Time served explained some of the variance between the five groups but not all of it as it was still significant.

F) Variation of Trait Anxiety keeping Time Served and Age of Staff Constant

The above procedure was continued further by keeping length of time served plus age of staff constant. There was no significant difference between trait anxiety scores for the five groups ($p=.06$, NS). Hence, length of time served and age of staff accounted for all of the variance in our five groups which produced a significant difference (Table XIII).

TABLE XIII Comparison of trait anxiety scores between 5 groups keeping A) time served and B) time served and age, constant

	df	F	Sig of F
No constants	4	6.41	p<.001
A) Time served constant	4	2.54	p<.05
B) Time served + age constant	4	2.41	p=.06 NS

G) Investigation of Correlations between Age of Staff, Trait Anxiety, Time Served and Days Off Sick

Correlations were performed using the Pearson product moment correlation test for each group. The purpose of this was to investigate any relationship between the following variables:

(i) Trait anxiety and days off sick.

(ii) Trait anxiety and age of staff, and

(iii) Trait anxiety and length of time served.

Each group was analysed separately.

Group 1 "Staff working with adult offenders in a secure block".

Trait anxiety was not significantly correlated with days off sick (r=-0.01, p=.485, NS) or with time served (r=0.11, p=.348, NS). Time served was not significantly correlated with days off sick (r=0.019, P=.472, ns).

Group 2 "Staff working with young offenders in a secure block".

Trait anxiety was not significantly correlated with days off sick (r=-0.44, p=.075, NS). A significant correlation was obtained between length of time served and trait anxiety. This was negative (r=-0.567, p=.027, p<.05); prison staff who had not been working long in the prison experienced higher levels of trait anxiety. Time served was not significantly correlated with days off sick (r=0.46, p=.067, NS).

Group 3 "Staff working with adult offenders in a less secure block".

It was observed that there was a lot of variation in Group 3 for time off sick, so that was investigated further. Trait anxiety was significantly correlated with days off sick (r=0.67, p=.008, p<.01), and negatively correlated with time served (r=-0.78, P=.001, P<-001). Hence, less experienced prison officers were more anxious and took more days off sick. Time served was negatively correlated with days off sick (r=-0.53, p=.037, p<.05).

Group 4 : Hostel A "Hostel staff working with young homeless women".

None of the correlations tested for Group 4 were significant.

Group 5 : Hostel B "Hostel staff working with young homeless women".

None of the correlations tested for Group 5 were significant.

H) Comparisons of Hostels on Trait Anxiety Scores using Analysis of Variance

Trait anxiety was significantly greater in Hostel A, Group 4 than Hostel B, Group 5 ($df=1$, $F=14.80$, $p<.01$). This was significant at the 1% level.

III. STATE ANXIETY

In this section, state anxiety changes were tested to see if there were any significant differences over the 10 day period of the study. Differences between the five groups, differences in state anxiety with number of incidents and differences between the start and end of the day were all tested.

A) Comparison of prison officers and hostel staff

A comparison was made between state anxiety levels in prison officers and hostel staff over the 10 days period, using analysis of variance. The anxiety level

at the beginning of each day and the anxiety level at the end of each day were tested. There was a significant difference only on the beginning of day 4 ($F=0.014$, $p<.05$). State anxiety was significantly higher in hostel staff than prison officers on this day.

B) <u>Comparison of prison officers and hostel staff in anxiety change during day 1 to day 10 inclusive</u>

It was decided that the anxiety change scores were a good indication of variance in each group. Anxiety change was computed as anxiety level at the end of each day minus anxiety level at the start of each day. It was noticed that for all staff members their state anxiety level was higher at the end of the day than at the beginning of the day. These differences are illustrated graphically for each group (see graphs I-V). It can be observed that prison officers dealing with offenders in areas with the least number of incidents, show less anxiety change over the days.

Anxiety change scores, DSTAI were compared between prison officers and hostel staff over the 10 day period to see if there were any significant differences. Significant differences between prison officers and hostel staff were found on: day 4 ($F=5.6$, $p=.02$, $p<.05$), day 6 ($F=4.88$, $p=.03$, $p<.05$) and day 10 ($F=4.41$, $p=.04$, $p<.05$). Hence, on days 4, 6 and 10 prison officers showed a significantly greater anxiety change score than hostel staff (Table XIV).

TABLE XIV Comparison of State Anxiety Change Scores (D.STAI) between prison officers and hostel staff using analysis of variance

Anxiety change scores (DSTAI) Day	df	F	Sig of F	
DSTAI (1)	1	5.775	.019	NS
DSTAI (2)	1	0.035	.852	NS
DSTAI (3)	1	2.5	.119	NS
DSTAI (4)	1	5.6	.02	p<.05
DSTAI (5)	1	1.08	.30	NS
DSTAI (6)	1	4.88	.03	p<.05
DSTAI (7)	1	.076	.78	NS
DSTAI (8)	1	.078	.78	NS
DSTAI (9)	1	.391	.53	NS
DSTAI (10)	1	4.411	.04	p<.05

NB: DSTAI = Anxiety level at the end of each day - anxiety level at the start of each day.

(C) Comparison of State Anxiety scores with the Normative value, 36.5 (Spielberger et al., 1970)

All five groups were compared individually on state anxiety scores with the normative value obtained by Spielberger et al. (1970) of 36.5.

State anxiety scores at the startand the end of the day were compared with the normative value, for each group usingthe Student's t test. The results are illustrated in Table XV.

Table XV Comparison of State Anxiety scores at the start and end ofthe day, for all five groups, with the normative value (Spielberger et al., 1970)

Group	Start/End	Mean	SD	Results of t-test (2-tailed)
1	Start	26.52	6.8	t = 5.7; df = 14; p < .001
	End	36.75	12.3	t = .08; df = 14; NS
2	Start	28.33	6.9	t = 4.1; df = 11; p < .01
	End	34.21	7.9	t = 1.0; df =11; NS
3	Start	26.44	6.1	t = 5.6; df = 11; p < .001
	End	27.26	5.3	t = 5.9; df = 11; p < .001
4	Start	31.05	3.5	t = 4.6; df = 8; p < .01
	End	37.01	6.8	t = 0.2; df = 8; NS
5	Start	27.24	3.7	t = 7.8; df = 9; p < .001
	End	29.78	3.6	t = 5.8; df = 9; p < .001

For all five groups at the start of the day, state anxiety was significantly less than the normative value obtained by Spielberger et al. (1970). There were also significant differences in the five groups in state anxiety at the start of the day ($F = 2.92$, $df = 4,54$; $p < 0.05$) (state anxiety score for group 4 was higher than in the other groups; 31.05).

At the end of the day, groups 1, 2 and 4 had state anxiety scores which were not significantly different from the normative value. State anxiety scores at the end of the day were significantly different in the five groups using analysis of variance ($F = 13.5$; $df = 4,54$; $p < 0.01$) (state anxiety scores for groups 3 and 5 did not reach the significance level).

Table XVI Comparison of all five groups of (a) state anxiety scores at the start of the day and (b) state anxiety scores at the end of the day, using analysis of variance

	Source of variation	Sum of squares	DF	Variance estimate	F value	Significance
(a)	Between groups	134	4	33.5	2.92	$p < .05$
	Within groups	618.9	54	11.46		
(b)	Between groups	4381.28	4	1095.3	13.5	$p < .01$
	Within groups	56270.24	54	81.1		

IV. Correlations between number of incidents, number of days and state anxiety levels for all 5 groups

Using the Pearson product moment correlation test the following variables were looked at to see if there were any significant correlations between them;

(i) Anxiety at the beginning of the day, and number of incidents on that day.
(ii) Anxiety at the end of the day and number of incidents on that day.
(iii) Number of incidents and day (1-10).

Group 1 "Staff working in a secure unit with adult offenders".

State anxiety at the end of the day was significantly correlated with number of incidents ($r=0.68$, $p=.028$, $p<.05$). There was no significant correlation between anxiety level at the end of the day and number of incidents ($r=0.198$, $p=.583$, NS).

There was no significant correlation between incidents and days ($r=.439$, $p=.204$, NS). State anxiety at the start of the day was significantly correlated with state anxiety at the end of the day ($r=0.785$, $p=.007$, $p<.01$), see Graph 1.

Group 2 "Staff working in a secure unit with young offenders".

State anxiety at the beginning of the day was not significantly correlated with number of incidents ($r=-.118$, $p=.743$, NS). Anxiety at the beginning of the day correlated significantly with anxiety at the end of the day ($r=.945$, $p=.000$, $p<.001$).

Incidents did not correlate significantly with anxiety at the end of the day (r=.128, p=.74, NS), see Graph 2.

Group 3: "Staff working in a less secure unit with adult offenders".

There were no incidents over the 10 day period so correlations for incidents could not be computed. There was no correlation between anxiety at the start of the day and anxiety at the end of the day (r=0.817, p=.822, NS), see Graph 3.

Group 4: Hostel A "Staff working in a hostel for young homeless women".

Anxiety at the beginning of the day was not significantly correlated with number of incidents (r=.102, p=.82, NS). There was a significant correlation between number of incidents and anxiety level at the end of the day (r=.848, p=.016, p<.05). Anxiety at the start of the day did not correlate with anxiety at the end of the day (r=-.51, p=.125, NS), see Graph 4.

Group 5: Hostel B "Staff working in hostels for young homeless women".

Anxiety at the start of the day did not correlated with number of incidents (r=-.185, p=.608, NS). There was no correlation between number of incidents and anxiety level at the end of the day (r=-.158, p=.664, NS). Anxiety level at the start of the day was correlated with anxiety level at the end of the day. This was significant (r=.699, p=.024, p<.05), see Graph 5.

IV. EVALUATION OF STRESS MANAGEMENT COURSE

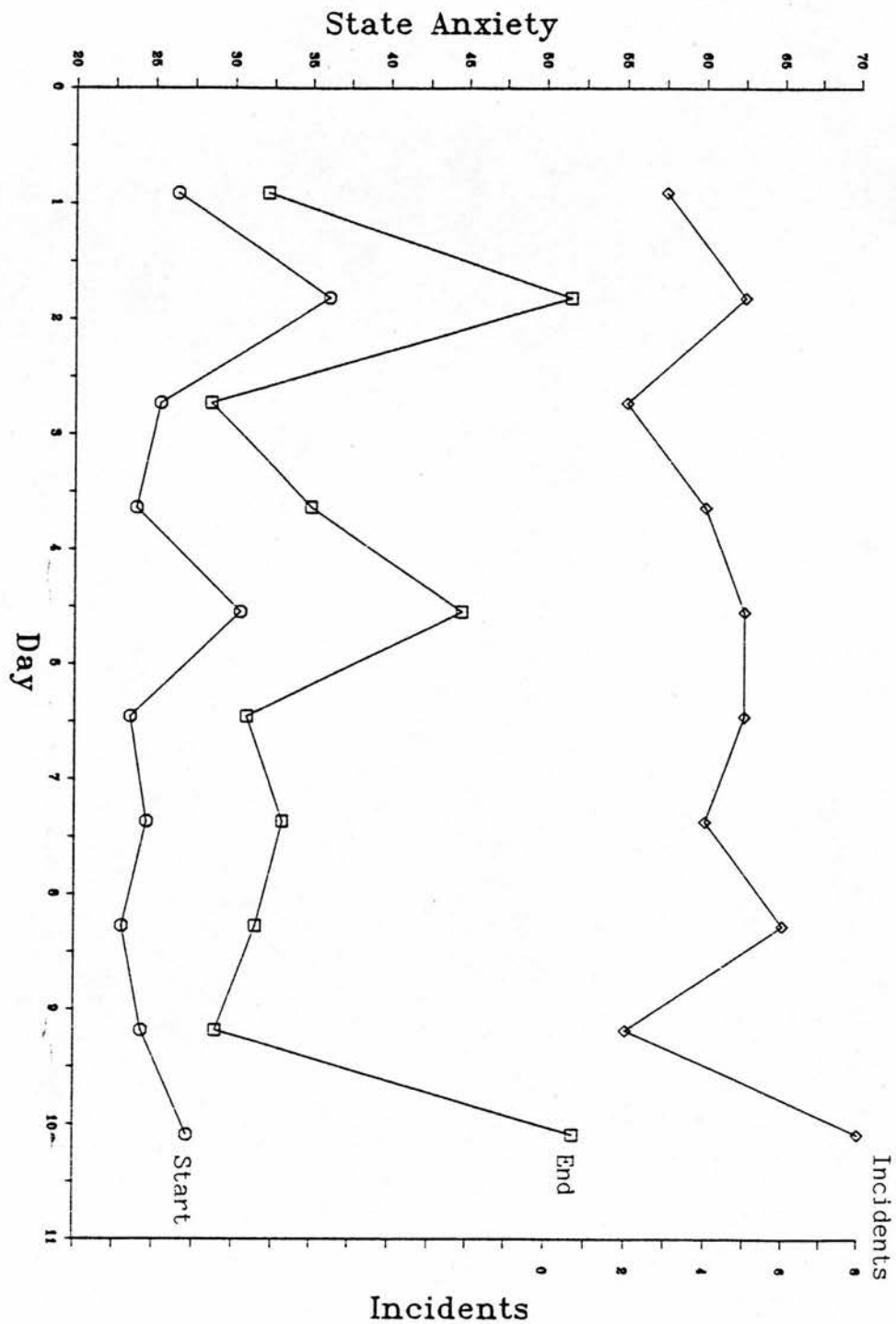
An evaluation of the written questionnaire is included in the appendix. All staff members who responded described the sessions as useful. A paired t-test was used to compare trait anxiety scores before the stress management course and trait anxiety scores one month following the stress management course. There was a significant difference between the scores ($t=5.14$, $df=1$, $p<.001$). Hence trait anxiety scores following the stress management course were significantly less than prior to the course for individual staff members of Hostel A. There was also a significant correlation between trait anxiety before the course and trait anxiety scores following completion of the course $r = .683$ $p<.05$). Table XVII illustrates the mean, standard deviation, standard error and variance for trait anxiety before the course (Anxiety B), trait anxiety after the course (Anxiety A) and percentage change between the two values (PCTCH).

TABLE XVII Trait anxiety before and after the stress management course and percentage change scores (PCTCH)

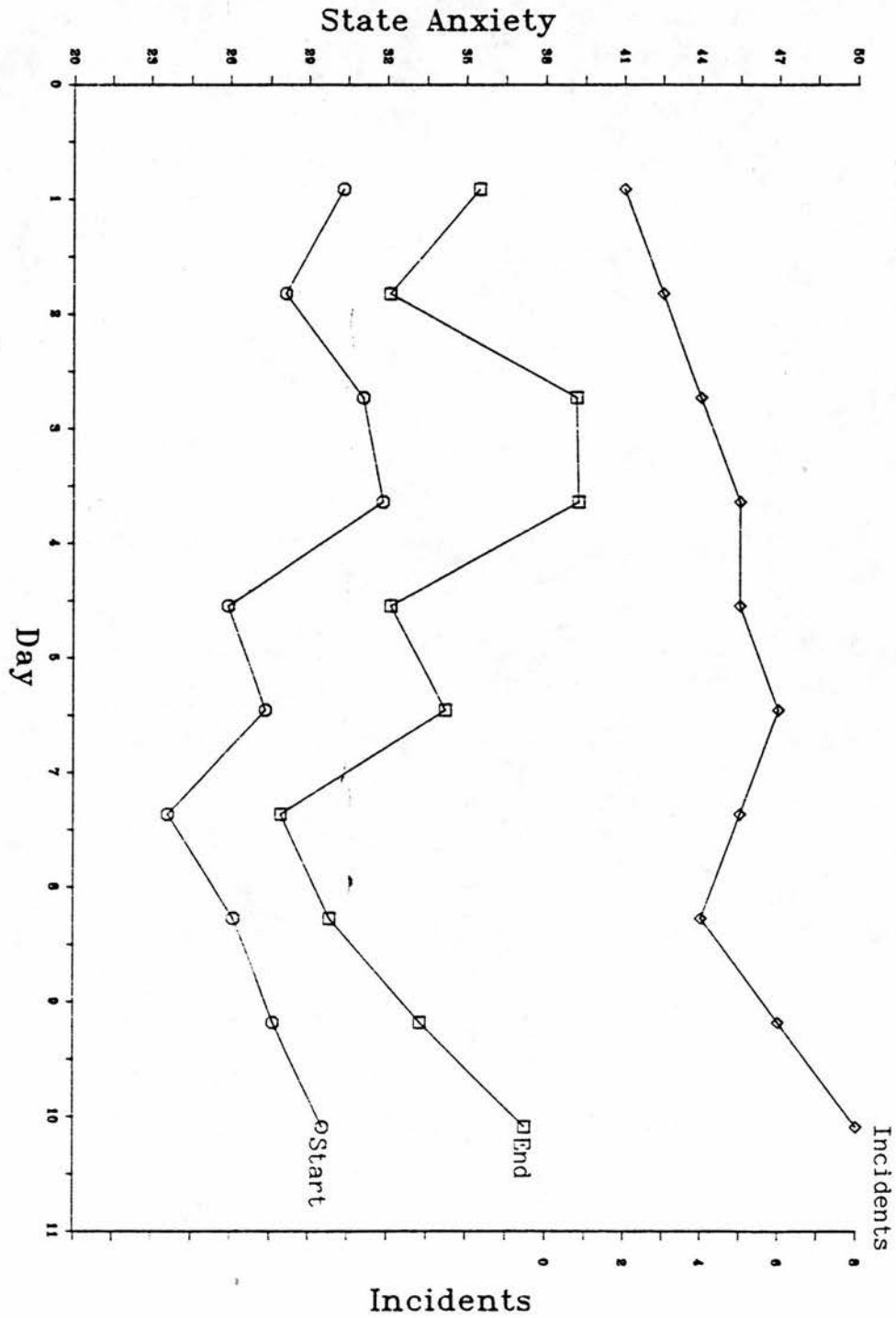
	Anxiety before (B)	Anxiety after (A)	PCTCH
x	33.625	28.125	15.87
Variance	18.55	10.13	60.47
n-1	4.31	3.18	7.78
SE Mean	1.52	1.13	2.75

The implications of these findings along with other results are discussed in the following section.

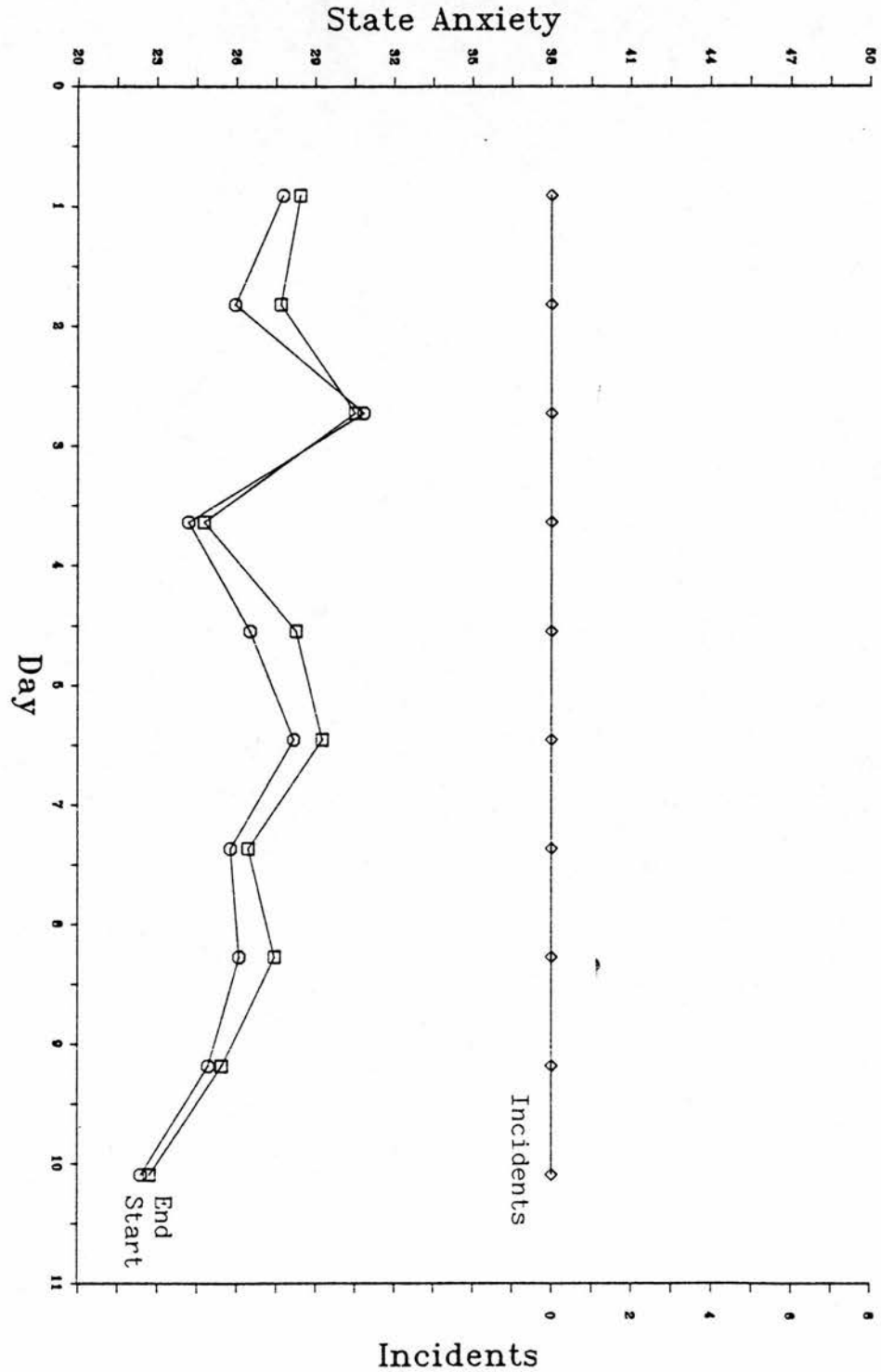
GRAPH I: Mean State Anxiety Score at the Start and End of the Day (1-10) against Number of Incidents for Group 1



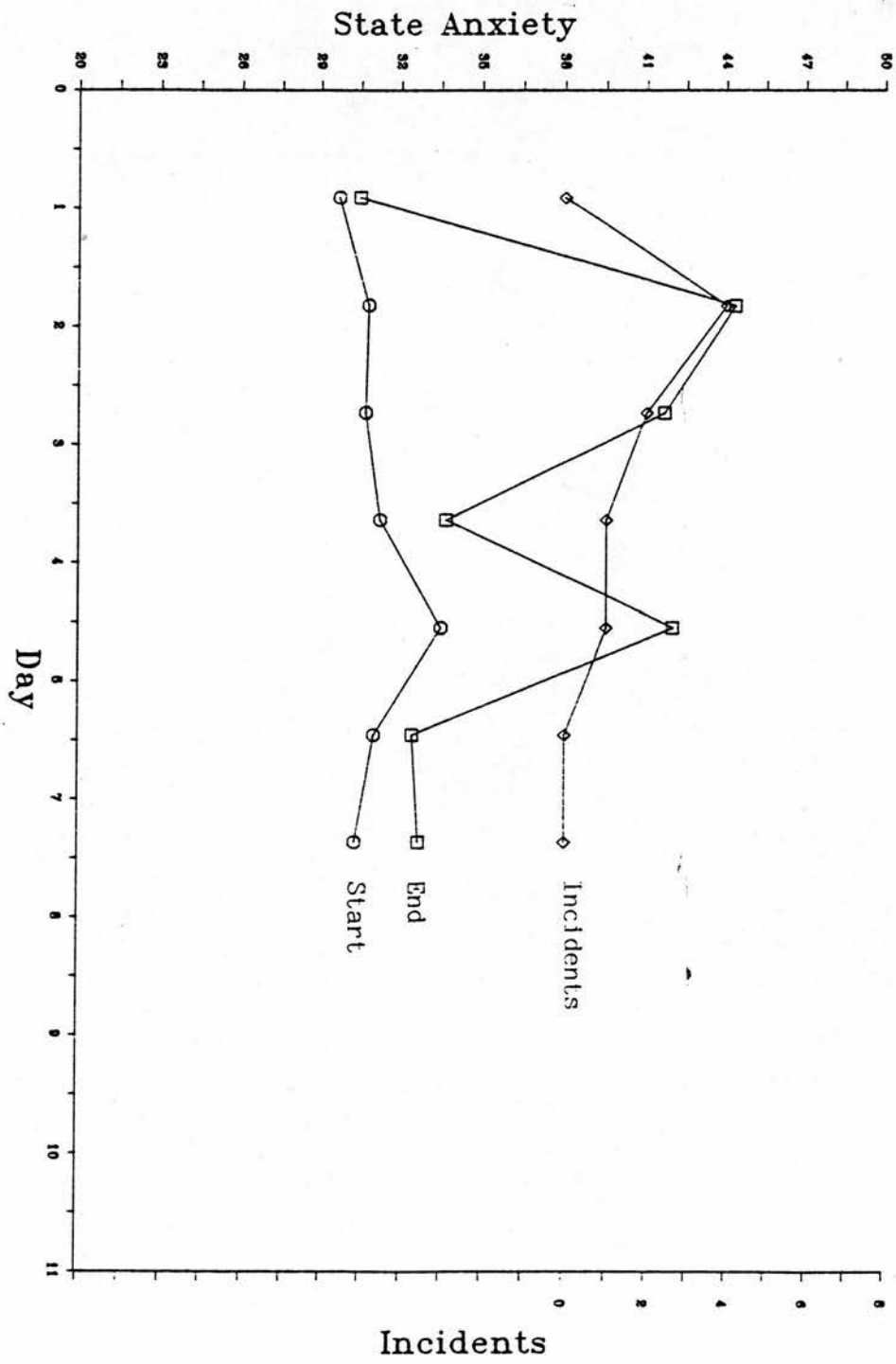
GRAPH II: Mean State Anxiety Score at the Start and End of the Day (1-10) against Number of Incidents for Group 2



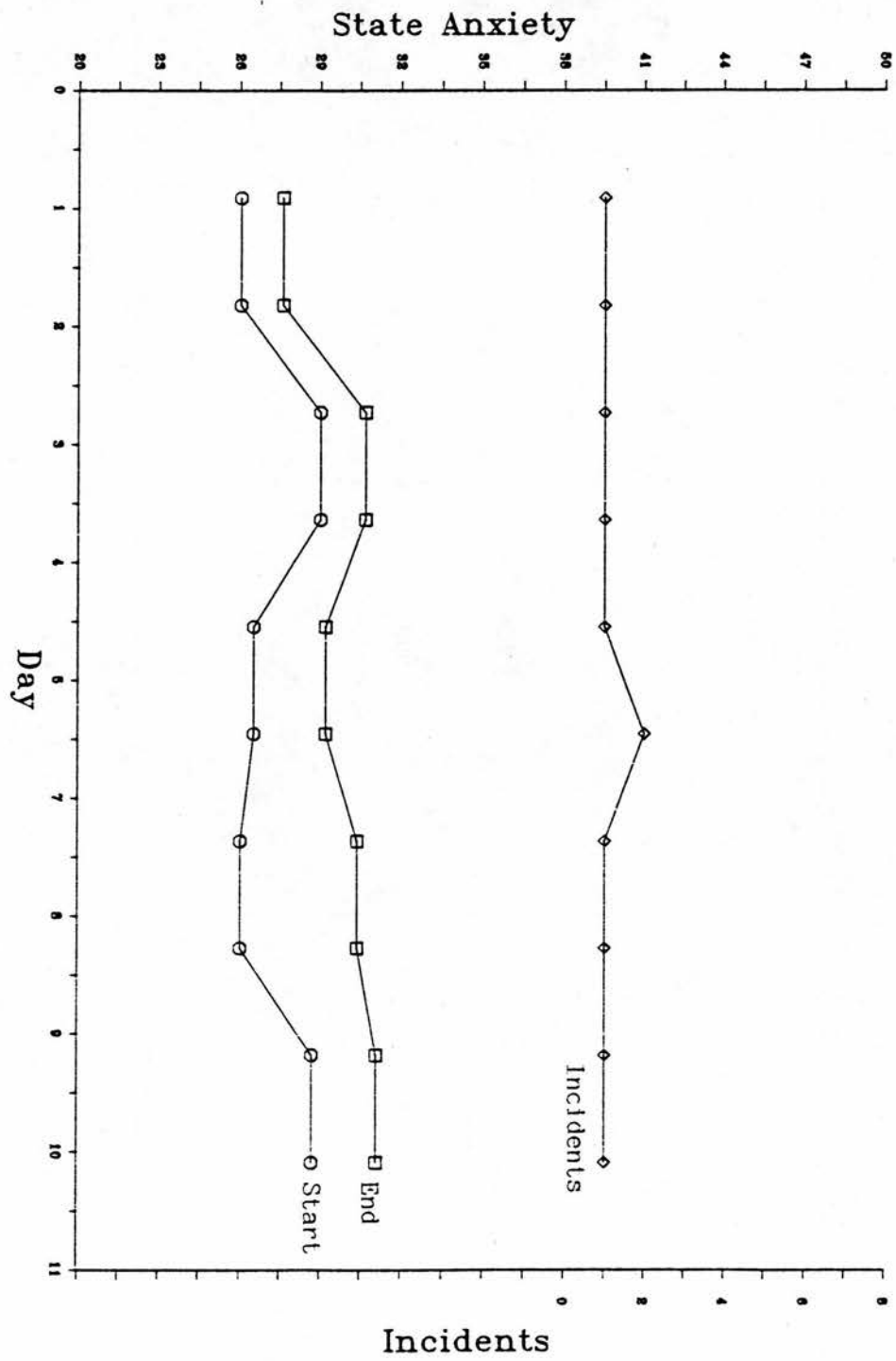
GRAPH III: Mean State Anxiety Score at the Start and and End of the Day (1-10) against Number of Incidents for Group 3



Graph IV: Mean State Anxiety Score at the Start and End of the Day (1-10) against Number of Incidents for Group 4: Hostel A



Graph V: Mean State Anxiety Score at the Start and End of the Day (1-10) against Number of Incidents for Group 5: Hostel B



DISCUSSION

This discussion will concentrate on the methodological issues of the process of the study and then the contents of the results will be addressed.

I. METHODOLOGICAL DIFFICULTIES

Research in a Prison Setting

There are particular problems with carrying out research in a prison setting (Inwald, 1988) e.g. four days before commencing the present study, there was a near fatal suicide in one of the secure blocks of the prison, which inevitably upset some of the officers. This may have affected the results. In addition to this there are internal flare ups between inmates, inmates and officers, unions and administrators, which Inwald (1988) considered very important considerations when interpreting results.

Other factors which may affect interpretation of the results is the voluntary participation of officers for the study. All officers were invited to take part in the present study but only 39 out of 186 staff completed all the relevant data required. The study may have selected the officers having the most difficulty with their work. Hence, this may not be representative of the majority of officers in the prison. The limitations of this sampling technique are acknowledged.

Additional factors which can influence anxiety levels e.g. the physical

environment, were not objectively measured by the present study. Hence, staff could have been influenced by other factors which were not accounted for.

Research on Stress

The present study employs a few limitations which have been discussed by Burke (1987). These will be addressed in turn along with their implications.

The present study used self-report data. This raises the possibility that the relationship between anxiety and health may be an artefact of similarity of method and overlap in content. The implications could be that staff reported what they thought was acceptable rather than 'true'. However, in everyday life verbal reports are accepted as valid and generally people's opinions are accepted at face value unless there is reason to do otherwise (Kidder, 1981). The same standards should therefore be applied to the present study.

Another shortcoming of the present study was the use of a cross-sectional methodology on an occupationally specific, small sample. The danger in this approach is that our results and interpretations are based on a ten-day period which may have been particularly unusual, with a discrete sample and without comparison to a wide variety of other occupational groups. Ideally, a longitudinal study would be beneficial to look at the effects over a longer time-period, with a larger group sample.

The present study was limited to the use of self-report data, personal data, and a measure of behavioural disturbance. Physiological data e.g. heart-beat, galvanic skin response, and blood pressure, have often proved useful in the study of stress but this was beyond the scope of the present study. Hence, the limited data source should be borne in mind when interpreting the findings.

Interestingly, little research in the area of stress has been carried out on women (Burke, 1977). It is advantageous that the present study addresses the issue in women, but it means previous work and subsequent interpretation of results in the light of previous research is more difficult. The work carried out e.g. on male prison officers, may not be transferable to female prison officers.

Finally, the varying and inconsistent definitions of stress have caused consequent difficulties in research in the area. Without standard definitions of a subject, accurate objective measurement remains difficult. The present study does not reach any conclusive solutions to the above problems. It is a pilot study which attempts to determine anxiety levels and gain more information concerning the stressful aspects of the work of female prison officers, and female hostel staff. It also looks at the usefulness of stress management in a hostel setting.

II. DISCUSSION OF RESULTS

Personal Data

No formal statistics were used with this data, but there are interesting implications from the most frequent responses.

Both prison officer groups who worked in secure blocks had problems getting to sleep which is consistent with the research by Pines and Maslach (1978) who found that staff had problems with insomnia when they were under stress. The same two staff groups found that dealing with disturbed inmates the most stressful aspect of their job. This is similar to the work by Long et al (1986) who found that in a large group of male prison officers, poor relations with inmates was a strong predictor of ill-health. Only the prison officers working with adult offenders found difficult staff relationships stressful. This was again found to be a strong predictor of ill health in Long et al's (1986) group of officers.

Dealing with attempted suicides was obviously a high stressor in prison officers dealing with adult offenders in a secure block. As mentioned previously, four days prior to the present study one of the inmates in this block attempted to kill herself.

The prison officers in the study reported frequently enjoying "the challenge" of their work, despite all the stressors involved. The positive aspects of their work is rarely documented.

Shiftwork was only mentioned as a problem by prison officers working in a secure block with adult offenders. This is consistent with work by Payne and Firth-Cozens (1987) on nursing staff who found it was also a common source of stress in this professional group. Prison officers working with young offender inmates found dealing with self-injurious behaviour very stressful. This is consistent with the fact there is a higher level of self-injury in this block than in the rest of the prison blocks. Prison officers reported feeling inadequate in dealing with it and were very deskilled by the process.

Prison officers working with adult offenders in the area of least disturbance had fewer problems sleeping than their colleagues in other blocks. The most stressful aspects for this group were difficult staff relationships and paperwork. This is consistent with the facts that there were no incidents during the period of the study in this block and the inmates are fairly independent of the staff.

It was surprising that none of the prison officers mentioned lack of support or role-conflict as being stressful. Perhaps this was due to the small sample used or the phrasing of the questionnaires. Alternatively, prison officers who took part in the study may have felt supported. It is an interesting contradiction to the findings of previous studies e.g. Cheek and Miller (1982), Poole et al (1980) and Brodsky (1982) who found increasing stress in male prison officers was not due to more difficult inmates but the changing goals of the prison system and the conflict created by these changes i.e. between the reformative and custodial aims of imprisonment plus the confusion of feeling in society. Perhaps, the conflict in role is more apparent in American male prison officers rather than the present female

officer population.

Both groups of hostel staff reported difficulty in sleeping. However, Hostel B staff argued that this was when they had to sleep in the hostel overnight. On these occasions they were often woken up by residents.

Hostel A staff found lack of staff support, role-conflict and being alone when incidents occurred, as most stressful. This is consistent with Whitfield's (1986) study in probation hostels. He found that staff were frequently left alone for up to 12 hours, to deal with incidents. He also suggested that staff required more training and support to deal with these potentially violent situations. Staff in the Hostel A group complained that they were frequently alone and found dealing with incidents, residents and difficult families very stressful. They also had little overlap between shifts so there was little opportunity to share concerns with other staff members. Often staff complained they were "taking their worries home".

Role-conflict occurred in Hostel A staff when they had to enforce rules with a resident for whom they were also a key worker. They felt this role jeopardised their therapy relationship with the resident and as a result found it very stressful. This is more consistent with the literature on role-conflict in prison officers where as well as maintaining a 'friendly' relationship with an inmate an officer has to enforce prison rules and remain alert to potential danger (Poole et al, 1980).

Hostel A staff also mentioned that low morale in their staff group was a problem. The lack of staff support due to little shift overlap accentuated this problem. Specific details of this will be addressed later with reference to the stress management course.

Role-conflict was not regarded as most stressful for Hostel B, perhaps because they had clearer defined roles and more support from colleagues. As a group they found dealing with disturbed residents and families most stressful, suggesting that training to deal with these situations would be beneficial (Whitfield, 1986).

Personal Data and Trait Anxiety

Hostel A staff were found to have a significantly greater trait anxiety score than the other four groups, hence showing no support for the hypothesis that prison officers working with young offender inmates would show higher levels of anxiety than hostel staff. Prison officers working with young offender inmates were found to have a significantly greater trait anxiety score than the rest of the prison officers and Hostel B staff.

Hence, our hypothesis suggesting Hostel A and Hostel B staff would have similar anxiety levels is refuted.

There are various explanations for the above findings. At the time when the present study was being completed, Hostel A staff requested stress management

sessions. This group recognised they were under stress and were open about admitting it. It is possible, therefore, that Hostel A staff reported their anxiety levels more accurately than some of the prison officer sample, who were perhaps trying to 'appear' as if they were coping more effectively. Alternatively, the prison officer sample may not have recognised the stress they were under. It is unlikely, however, that the group of female prison officers who took part in the present study were behaving typically as Cheek and Miller's (1983) proposed 'John Wayne Syndrome' seen in male American Correction officers. However, Cheek and Miller (1983) also found a high level of 'denial' of stress in their group of officers which could also be the case for some of the prison officers who took part in the present study.

Hostel A was situated in a more contained environment than Hostel B. They were an isolated staff group, lacking support and situated so there was a lot of opportunity for conflicts to occur and affect the whole hostel. Hostel staff were often coping with incidents alone, which would rarely happen in the prison. The prison is also a more controlled environment with staff expecting incidents to occur. However, in the hostels, the residents have a lot more independence and freedom to get into potential trouble, e.g. going out into the centre of Glasgow in the evenings. The hostel staff were also younger and significantly less experienced that the prison officer group. Hostel A staff had also recently been told they would have to move in the near future to another area of Glasgow, while their house was renovated. This had caused a lot of uneasiness and bad feelings amongst the staff group and could also have contributed to the differences in anxiety levels between the five groups.

Finally, Hostel A staff, contrary to the prison officer group, reported a lot of frustration in their work. This arose from two aspects of their job:

(i) Their inability to affect changes in management

(ii) The conflict in being a key worker 'therapist' and the person enforcing rules in the same resident.

It was surprising that role-conflict was not mentioned by prison officers as a major source of stress. This is contrary to studies by Brodsky (1982) and Cheek and Miller (1983) who showed that it was one of the primary stressors in male correctional officers. Perhaps the present study did not address this issue in sufficient detail. Our study found that the Hostel A staff and prison officers working with young offender inmates were significantly more anxious than the other groups. This suggests that for the populations used in the present study, working with 16 to 21 year olds is particularly difficult and stressful. Further research should perhaps address this issue in more detail.

Interestingly, although one of the hostel staff groups were significantly more anxious than the other groups, there was a significantly higher level of prison officers who smoked. Hence, hostel staff were not attempted to cope with stress by smoking. The level of smoking in the prison officers is consistent with the level found in nursing staff by Hingley and Cooper (1986) and the level found in female prison officers (Posen, 1985). They found that levels of smoking in nursing and prison staff has remained higher than the national average for women, which is presently declining.

When hostel staff and prison officers were grouped together, hostel staff were found to have significantly higher trait anxiety scores. However, when age and time-served was kept constant, all this variance was removed and there was no longer a significant difference between the groups. Hence, younger less experienced staff were more anxious than older more experienced staff, thus supporting the null hypothesis. This has implications for staff selection to work in both of these environments. Perhaps more experienced staff should be selected for this work or alternatively receive training to accelerate the effects of age and length of experience. The benefits of training in prison officers has been well documented (Smith, 1984; Cheek and Miller, 1982; Brodsky, 1982).

It was interesting to note that none of the groups in the present study scored significantly higher than Spielberger et al's (1970) normative value. The differences could be due to his norm being based on an American population and it is therefore higher than expected. Some of Spielberger's sample were involved in managerial decision-making in a large organisation which was inevitably stressful.

Correlations between age, trait anxiety, length of time served and days off sick will be discussed and then trends between groups will be addressed. Prison officers working with adults in the less secure block took more time off sick as they became more anxious. This resulted in staff morale decreasing. Inexperienced staff took significantly more time off sick than experienced staff. This suggests that young staff who had not been working for very long took time off when they felt unable to cope. Older staff develop some coping strategies for when they are feeling under stress, or adapt to the environment and no longer feel the negative

effects of it. Officers working with young offenders also took significantly more time off sick the less experience they had.

These results are consistent with the results of a Health Education report in 1988 sponsored by the Health Education Authority, to look at the effects of stress in nurses, police, social work and teaching. They found that the cumulative effects of stress led to high sickness levels and absenteeism in education, health and welfare organisations. In the same document, Lunn (1975) found that absence rates in student nurses was double the rates for young women of similar age in other occupations. He claimed to find:

"a very pronounced picture of stress reactions and anxiety amongst nurse learners as a consequence of the unrestrained demands of nursing as an occupation" Lunn (1975).

There is a similar pattern shown in our prison and hostel staff groups. Both of our hostel groups showed a trend towards taking more time off sick with less experience, similar to the prison officer groups.

State Anxiety

State anxiety was significantly higher in hostel staff than prison officers on one day. Hostel A staff had significantly higher trait anxiety scores, hence greater changes in state anxiety would be expected, according to Spielberger (1966). In Hostel A, there had also been six incidents over the previous two days, so staff might have been expecting further incidents which would explain their increase in

state anxiety levels. Apart from prison officers working in a block where there were no incidents during the present study, officers were 'used' to high levels of disturbance and perhaps they was why they did not react so greatly.

However, when change in state anxiety level was looked at over each of the ten days, on three of those days the prison officers had a significantly greater anxiety change score than the hostel staff. Two of these days were at the weekend. Perhaps prison officers expected there to be fewer incidents at the weekend and were more affected by them than during the week. There were fewer staff on duty at the weekend which made the number of incidents more difficult to deal with. The results could also have been affected by the near fatal suicide in one of the blocks which has already been mentioned. Prison officers could have had a delayed stress reaction to this incident similar to the 'post-traumatic stress syndrome' shown in male prison officers following hostage-taking incidents (Hall, 1989). The differences between hostel and prison officer groups on day 10 is almost certainly due to the number of incidents in both the adult and young offender blocks. They were particularly high on this day.

The results confirmed our null hypothesis that anxiety levels increase as the number of incidents increase in all groups. On some occasions, hostel staff came on duty with high anxiety levels. This may precipitate the occurrence of further incidents. Overall, the picture seems to be that hostel staff and prison officers are reacting to the number of incidents which occur rather than the nature of the incident itself. This is perhaps rather surprising as one might imagine particular incidents e.g. attempted suicides, to be particularly more stressful to staff.

The graphs, included at the end of the results section, together with the anxiety change scores, support the hypothesis that prison officers working in areas of greater behavioural disturbance, experience higher levels of anxiety than those working elsewhere. The present study also shows these officers have greater anxiety change scores during the day, as incidents occur.

None of the groups had state anxiety scores which were significantly greater than those obtained by Spielberger (1966). However, three of the groups had state anxiety scores which were not significantly different from Spielberger's normative value. All these occurred at the end of the day. Blackburn (1986) obtained a normative value on the STAI of 29.,4 $\pm$ 6.4, on a British sample. This was significantly less than Spielberger's normative value but it was obtained on a small sample of 31 subjects. However, it suggests that Spielberger's normative value is higher than expected for a British sample and therefore inappropriate.

Prison officers at the women's prison had postulated during the study that anxiety levels might fall during the day due to the relief that the day was over and that the day was never as bad as expected. Neither of these reasonings were shown

to be true.

A more cynical interpretation of the results could be if staff did not fill in the questionnaires at the correct time, but instead at the end of the day retrospectively. It is difficult to control this aspect of the research due to the nature of the work of these groups. However, this may have influenced the results.

Correlations between incidents, day and state anxiety levels at the start and end of the day for all five groups

There was a lot of individual variations between groups in the correlations. This is consistent with Cooper et al's (1980) view who stated that there is a lot of variability and complexity involved in the area of job stressors. They suggested further research should take account of individual differences.

Prison officers working with adult offenders in a secure block became more anxious as a result of incidents occurring during each particular day. If this group of officers came to work anxious they would also finish work being proportionally more anxious. This was also the case for officers working with young offenders.

It is interesting to suggest why no incidents were recorded in the less secure block containing adult offenders. It could be that the prison officers in this group tolerated more without perceiving it as an incident. As these officers as a group were less anxious than the other officer groups, they were less likely to respond to incidents negatively but deal with them by discussions in a calmer environment.

Alternatively, the ten day period during the present study could have been particularly quieter than usual in this block.

Staff in Hostel A were affected by the number of incidents as they occurred and their anxiety level increased proportionally. Again, as for the prison staff, this suggests that Hostel A staff were reacting to the number of incidents which occurred rather than the type. This is also consistent with the fact that in Hostel A staff could be left alone to deal with incidents. If one incident occurred it may be dealt with effectively but if more than one incident occurred during the day, hostel staff were overwhelmed.

Stress Management Course

Stress management courses have been recommended in the literature for combating prison officer and hostel staff stress and burnout (Smith, 1984; Cheek and Miller, 1982; Cherniss, 1980; Whitfield, 1986). During the present study the project leader in Hostel A requested stress management sessions for her staff. Following completion of the present study, stress management sessions took place weekly in Hostel A. Details of the content of the sessions can be found in Appendix VI.

Measures of trait anxiety scores of individual staff members were recorded before the sessions and one month following completion of the course. Staff members who scored highly on trait anxiety measures before the course also scored highly one month after the course had been completed. However, all anxiety scores

for the staff members had reduced significantly one month after completion of the course. This has several implications for the use of stress management courses in hostels.

The hostel staff also completed an evaluation form concerning the course. They all responded positively to the sessions, especially those relating specifically to the sources of work stress. It was picked up from the sessions that as a staff team they did not communicate or share concerns about residents easily. Hence staff support was lacking and this has been reflected in their significantly higher anxiety scores.

Various workers have mentioned that staff support and successfully dealing with work stress are very important factors for an organisation to consider (Smith, 1984; Cheek and Miller, 1982; Brodsky, 1982).

Experience of the present study suggests that stress management courses should be carefully designed. The individual running of the course should have a detailed knowledge of the worker's primary stressors and role-conflicts. A detailed functional analysis of stressors should be carried out initially, followed by a stress management course addressing these issues and an evaluation of the effectiveness of the course content.

III. IMPLICATIONS OF THE PRESENT STUDY

The present study supports previous research which shows that individuals who are under stress and in conflict at work should have some organisational options for dealing with stress (Brodsky, 1982). This is shown by the Hostel A staff group who lacked support, were isolated as a group and found it difficult to communicate with each other. It is also interesting to note that there have been high levels of staff turnover in this particular group and staff changes have occurred since completing the present study. Hence, all these factors contributed to an usually high anxiety score by this group.

If staff support were offered, perhaps individuals would not have to suffer stress or develop long-term problems as a consequence. Organisations should recognise the signs of stress in their workers early on, and offer training or a change of role, instead of the individual denying the existence of a problem. The present study follows some of the recommendations proposed by Smith (1984) in his study on male prison officers in Britian. He proposed that in dealing with stressed individuals, input should be carried out at two levels:

1. Organisational level - the working environment should be altered, selection procedures looked at, and improved management and communications between staff. In the present study, results imply that staff should be selected with a few years of experience to work in these hostels and women's prisons. Alternatively, they should be offered training to overcome their lack of experience.

2. Individual level - work should be carried out with staff at an individual or group level, which is specific to their needs. Administrators should also pay particular attention to young workers and observe for early signs of stress, to avoid resulting burnout (Linquist and Whitehead, 1986).

Perhaps prison officers and hostel staff would benefit from training in dealing with interactions with inmates or residents to modify their expectations and perceptions about them (Toch and Grant, 1982). Along with stress management techniques, this would assist staff to combat the long-term effects of stress and give them more positive coping strategies.

Finally, role conflict has been previously shown to be a major stressor in male correctional officers (Cheek and Miller, 1983; Brodsky, 1982). It was not mentioned by the present prison officer group but hostel staff perceived it as a major stressor in their work. Perhaps it was not picked up in prison officers as an issue, due to the nature of the present study.

IV. CONCLUSIONS

Female prison officers working in areas of high disturbance showed significantly higher levels of state anxiety than those working elsewhere, hence supporting the initial hypothesis.

Prison officers working with young offender inmates did not show higher levels of trait anxiety than hostel staff groups, hence giving no support to this

hypothesis.

Hostel A staff had significantly higher trait anxiety scores than prison officers working with young offender inmates.

Measures of state anxiety increased significantly as incidents occurred during the day, hence supporting the null hypothesis.

Anxiety levels fluctuated more widely in areas of greater behavioural disturbance also supporting the hypothesis.

Anxiety levels were significantly higher in prison offiders and hostel staff who were younger and less experienced.

Trait anxiety levels in Hostel A were significantly greater than in Hostel B, hence refuting the hypothesis that they would be similar.

Finally, as supported by the null hypothesis, stress management sessions significantly reduced trait anxiety levels in Hostel A staff.

V. RECOMMENDATIONS

From the results of the present pilot study the following tentative suggestions are made:

Workers who are experiencing stress in their organisation should be recognised as early as possible by management and receive adequate support and training to combat the stress experienced.

Prison officers and hostel staff who are working in stressful situations should be selected by their age and years of relevant experience. Alternatively, they should be given adequate training to make up for their lack of experience. Prison officers and hostel staff working in stressful situations should receive specific training in the following areas at regular intervals during their career:

a) Training in dealing with difficult or disturbed inmates, residents or relatives.

b) Stress management techniques.

c) Assertiveness training to deal more effectively with interpersonal problems which may be a source of stress in the organisation.

Guidelines should be issued for staff working in these areas which address role-conflict. These guidelines should clearly define an individual's role in the organisation, and thereby reduce the stress involved.

Stress will never be completely eliminated from the role of a prison officer or hostel worker. Stress-reduction techniques are therefore essential for the good physical and mental well-being of these staff.

The present study was a pilot study and does not answer all the areas of concern. Future research in this area should include a longitudinal design

addressing other factors as well as self-report data, personal data and level of incidents e.g. physiological measures (Kidder, 1981).

There is a need for the development of criteria measures and rating systems which can be reliably used by individuals without a psychological background, scheduling of data collection times which do not disrupt routine and the use of prison officers to gather information which is non-threatening to reveal. These are the steps towards meeting the goals of stress research in the prison setting (Inwald, 1988).

Further research should accurately define stress and its sources. It should further explore the nature of the differences in staff working with adult or young inmates and residents. It should clarify which factors are consistent predictors of long-term stress and which result in burnout across the diversity of human service settings, and which factors are specific to hostel staff, prison officers and their job setting.

REFERENCES

Aitken, L.R. (1961) Stress and Anxiety as Homomorphisms. Psychological Record II, 365-372.

Baxter (1978) In Ellison K. & Genz, J. 1983. Stress and the Police Officer, Charles C. Thomas.

Beck, A.T. (1976) Cognitive Therapy and the Emotional Disorders. International Universities Press, New York.

Beck, A.T. & Emery, G. (1985) Anxiety Disorders and Phobias: A Cognitive Perspective. Basic Books, New York.

Birch (1979) Summarised in Hingley & Cooper, 1986. Stress in Nurse Managers. King's Fund Project, Paper No.60.

Blackburn, I.M., Jones, S. & Lewin, R.J.P. (1986) Cognitive Style in Depression. British Journal of Clinical Psychology, 25, 241-251.

Blackburn, I.M. & Davidson, K.M. (1989) Cognitive Therapy for Depression and Anxiety: A Practitioner's Guide. Blackwell Scientific Publications.

Booth, P. (1985) Back on the Rails. Nursing Times, 28, 16-17.

Brodsky, C.M. (1977) Long-term stress in Teachers and Prison Guards. Journal of Occupational Medicine, 19, 133-138.

Brodsky, C.M. (1982) Work Stress in Correctional Institutions. Journal of Prison and Jail Health, 2, (2).

Burke, R.J. (1987) The Present and Future Status of Stress Research. Journal of Organisational Behaviour Management, 8 (2), 249-267.

Cheek, F.E. & Miller, M.D. (1982) Prisoners of Life: A Study of Occupational Stress among State Correctional Officers. American Federation of State County and Municipal Employees.

Cheek, F.E. & Miller, M.D. (1983) The Experience of Stress for Correctional Officers: A Double-bind Theory of Correctional Stress. Journal of Criminal Justice, 11 (2).

Cherniss, C. (1980) Staff Burnout: Job Stress in the Human Services. Newbury Park, C.A. Sage.

Conway, T.L, Vickers, R.R., Ward, H. & Rahe, R.H. (1981) Occupational Stress and Variation in Cigarette, Coffee and Alcohol Consumption. Journal of Health and Social Behaviour, 22, 155-166.

Cooper, C.L. (1980) White Collar and Professional Stress. Cooper, C.L. and Marshall, J. (Eds) John Wiley & Sons.

Cooper, C.L., Davidson, M.J. & Robinson, P. (1982) Stress in the Police Service. Journal of Occupational Medicine, 24, 30-36.

Cooper, C.L. & Payne, R. (1980) (Eds) Current Concerns in Occupational Stress. New York: John Wiley & Sons.

Cox, T. & Mackay, M. (1981) A Transactional Approach to Occupational Stress. In Carlett, E.N. & Richardson, J. (Eds) Stress Work Design and Productivity. Wiley & Sons, Chichester.

Cox, T. (1985) The Nature and Measurement of Stress. Ergonomics, 28, 1155-1163.

Cushway, D. (1988) Stress in Clinical Psychology Trainees. MSc Thesis: Birmingham University.

Dorian, D. & Taylor, B. (1984) Stress Factors in the Development of Coronary Artery Disease. Journal of Occupational Medicine, 26 (10), 747-756.

Einsiedel, A.A. & Tully, H.A. (1980) Methodological Considerations in Studying the Burnout Phenomenon. Paper presented at the meeting of the American Psychological Association, Los Angeles.

Farmer, R.E., Monahan, L.H. & Hekeler, R.W. (1984) Stress Management for Human Services. Sage Publications.

Ferris, G. & Bergin, T. (1984) Personal Characteristics, Job Performance and Absenteeism. Paper presented at the Annual Meeting of the American Psychological Association, Toronto, Canada.

Freud, S. (1923) The Problem of Anxiety. New York, Norton. Originally published in German under the title Inhibition Symptom and Anxiety.

Freudenberger (1974) Staff Burnout. Journal of Social Issues, 30, 159-165.

Gentry, W.G. & Parkes, K.R. (1982) Psychological Stress in Intensive Care Unit and Non-Intensive Care Unit Nursing: A Review. Heart and Lung, 11, 43-47.

Gerstein, L.H., Topp, C.G. & Carrell, G. (1987) The Role of the Environment and Person when predicting Burnout among Correctional Personnel. Criminal Justice and Behaviour, 14 (3), 352-369.

Haggard, S. (1988) In Stress in the Public Sector. Health Education Authority, March.

Halford, A. (1987) Report of the Merseyside Police. Stress in the Police Service.

Hall, R. (1976) Relationship between Social Anxiety and Social Behaviour. PhD Thesis.

Hall, R. (1989) The Effects of Violence: Stress in Prison Officers. Paper presented at the Annual Conference of the British Psychological Society, St Andrew's University, April 1989.

Health Education Authority (1988) Stress in the Public Sector. Nurses, Police, Social Workers and Teachers.

Hingley, P., Cooper, C. & Harris, P. (1986) Stress in Nurse Managers. King's Fund Project. Paper No.60.

Hoch, P.H. & Zubin, J. (1950) (Eds) Anxiety. New York, Grune & Stratton.

Inwald, R.E. (1988) Research Problems in assessing Stress Factors in Correctional Institutions. International Journal of Offender Therapy and Comparative Criminology.

The Judge Report (1985) Commission for Nursing Education. The Education of Nurses: A New Dispensation. RCN.

Kahn, R.L. & Frend, J.P.R. (1970) Status and conflict: Two themes in the Study of Stress. In McGrath, J.E. (Ed) Social and Psychological Factors in Stress. Holt, Rinehart & Winston, New York.

Kidder, L.H. (1981) Cited in Shaughnessy, J.J. & Zechmeister, E.B. (1985) Research Methods in Psychology. A.A. Knopf, New York.

Kroes, W.H. (1985) Society's Victim - The Police. (2nd edn). Thomas: Springfield, Illinois.

Lee, C. (1987) Professionals in Medical Settings. The Research Evidence in the 1980s. Journal of Organisational Behaviour Management, 1 (2), 195-213.

Levitt, E.E. (1971) The Psychology of Anxiety, Paladin.

Linquist, C.A. & Whitehead, J.T. (1986) Burnout, Job Stress and Job Satisfaction among Southern Correctional Officers: Perceptions and Causal Factors. Journal of Offender Counselling, Services and Rehabilitation, 10 (4), 5-26.

Lippold, R. (1978) A Manual for Stress Management for Corrections. Carson City, NV BBKK.

Lomardo, L. (1981) Guards Imprisoned: Correctional Officers at Work. NY, Elsevier.

Lomardo, L. (1986) Group Dynamics and the Prison Guard Subculture? Is the Subculture an Impediment to helping Inmates? International Journal of Offender Therapy and Comparative Criminology.

Long, N.R., Shouksmith, G., Voges, K.E. & Roache, S. (1986) Stress in Prison Staff: An Occupational Study. Criminology, 24, 331-345.

Long, N.R. & Voges, K.E. (1987) Can Wives perceive the Source of their Husbands' Occupational Stress? Journal of Occupational Psychology, 60, 235-242.

Lunn, J.A. (1975) Absenteeism - An Occupational Hazard. Nursing Mirror, 140.

Marshall, J. (1980) Stress amongst Nurses. In Cooper, G.L. & Marshall, J. White Collar and Professional Stress. John Wiley & Sons.

Maslach, C. & Jackson, S. (1978) A Scale Measure to assess Experienced Burnout: The Maslach Burnout Inventory. Paper presented at the Western Psychological Association, San Francisco.

Maslach, C. (1979) The Burnout Syndrome and Patient Care. In Garfield, C. (Ed). Stress and Survival: The Emotional Realities of Life-Threatening Illness. 111-120. St Louis Mosby.

Maslach, C. & Pines, A. (1977) The Burnout Syndrome in the Day Care Setting. Child Care Quarterly, 6, 100-113.

Maslach, C. & Jackson, S. (1981) The Measurement of Experienced Burnout. Journal of Occupational Behaviour, 2, 99-113.

Maslach, C. (1976) Burned Out. Human Behaviour, 5, 16-22.

Maslach, C. (1982) Burnout: The Cost of Caring. Engelwood Cliffs, N.J. Prentice-Hall.

Mobley, M.J. (1985) Occupational Hazard? Stress has many Implications for the Administrator. Corrections Today. Dec. 18-20.

Monet, A. & Lazarus, R.S. (1977) (Eds) Stress & Coping. New York: Columbia University Press.

Payne, R. & Firth-Cozens, J.A. (1987) Preface and introduction. In Stress in Health Professionals. Payne, R. & Firth-Cozens, J.A. (Eds) Wiley & Sons, Chichester.

Payne, J., Janman, K., Jones, J. & Rick, J. (1987) Some determinants of stress in psychiatric nurses. International Journal of Nursing Studies, 24 (2), 129-144.

Pines, A. & Maslach, C. (1978) Characteristics of staff burnout in Mental Health Settings. Hospital and Community Psychiatry, 29, 233-237.

Pines, A., Aronson, E. & Kafry, D. (1981) Burnout. New York: Free Press.

Poole, E.D. & Regoli, R.M. (1980) Role Stress, Custody Orientation and Disciplinary Actions. A Study of Prison Guards. Criminology, 18 (2), 215-226.

Posen, I. (1985) Survey of Work Stress at Holloway, in H.M. Prison Service Proceedings of the Prison Psychologists Conference (1985) Williams, M. & Bateson, V. (Eds) DPS Report No. 149: Home Office, Prison Department, London.

Powell, D. (1982) Learning to Relate? A Study of Student Psychiatric Nurses' View of their Preparation and Training. Royal College of Nursing, London.

Quick, J.C. & Quick, J.D. (1984) Occupational Drinking Patterns and Alcohol-Related Problems. British Journal of Addiction, 74 (3), 267-273.

Quick, J.D., Harn, R.S. & Quick, J.C. (1987) Health Consequences of Stress. Journal of Organisational Behaviour Management, 8 (2), 19-36.

Runyon, R.P. & Haber, A. (1980) Fundamentals of Behavioural Statistics. 4th Edition. Addison-Wesley Publishing Company.

Russek, H. (1965) Stress, Tobacco and Coronary Health Disease in North American Professional Groups. Journal of American Medical Association, 192, 189-194.

Rutter, D.R. & Fielding, P.J. (1988) Sources of Occupational Stress: An Examination of British Prison Officers. Work and Stress, 2 (4), 291-299.

Sampson, J. (1989) Stress Survey of Clinical Psychology in Scotland. Published in British Psychological Society: Scottish Branch Newsletter No. 11.

Seyle, H. (1976) The Stress of Life. 2nd Edition. McGraw-Hill: New York.

Shamir, B. & Drory, A. (1982) Occupational Tedium among Prison Officers. Criminal Justice and Behavior, 9, 79-99.

Smith, T. (1985) Stress in Prison Officers. In H.M. Prison Service Proceedings of the Prison Psychologists' Conference (1985) Williams, M. & Bateman, V. (eds) DPS Report No.149: Home Office, Prison Department, London.

Smith, T. (1984) Stress in the Prison Service. Prison Service Journal, 56, 10-11.

Spielberger, C.D. (1966) Theory and Research on Anxiety. In Spielberger, C.D. (1966) (Ed) Anxiety and Behaviour. New York: Academic Press.

Spielberger, C.D. (1970) Manual for the State-Trait Anxiety Inventory. In Collaboration with Gorsuch, R.L., Lushene, R.L., Vagg, P.R. & Jacobs, G.A. Consulting Psychologists Press Inc, Palo Alto, California.

SPSS-X Users' Guide (1988) 3rd Edition. SPSS International, United States of America.

Thomas, J.E. (1974) The Prison Officer: A Conflict in Roles. Journal of Psychosomatic Research, 18, 259-262.

Toch, H. & Klofas, J. (1982) Alienation and desire for job enrichment among correction officers. Federal Probation, 46 (1), 35-47.

Toch, H. & Grant, J. (1982) Reforming Human Services: Change through Participation. Newbury Park, CA, Sage.

Washington Crime News Service (1975) In Stress in the Public Sector. Health Education Authority (1988).

Whitfield, D. (1988) Dealing with Violence. A Hostel Perspective. International Journal of Offender Therapy and Comparative Criminology.

Zuckerman, M. (1960) The Development of an Affect Adjective Check List for the Measurement of Anxiety. Journal of Consulting Psychology, 24, 457-462.

LIST OF APPENDICES

APPENDIX I

SELF-EVALUATION QUESTIONNAIRE

Developed by C.D. Spielberger, R.L. Gorsuch and R. Lushene

STAI Form X-1

NAME DATE

DIRECTIONS: A number of statements which people have used to describe themselves are given blow. Read each statement and circle the appropriate number to the right of the statement to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

1.	I feel calm	1	2	3	4	5
2.	I feel secure	1	2	3	4	5
3.	I am tense	1	2	3	4	5
4.	I am regretful	1	2	3	4	5
5.	I feel at ease	1	2	3	4	5
6.	I feel upset	1	2	3	4	5
7.	I am presently worrying over possible misfortunes	1	2	3	4	5
8.	I feel rested	1	2	3	4	5
9.	I feel anxious	1	2	3	4	5
10.	I feel comfortable	1	2	3	4	5
11.	I feel self-confident	1	2	3	4	5
12.	I feel nervous	1	2	3	4	5
13.	I am jittery	1	2	3	4	5
14.	I feel "highly strung	1	2	3	4	5
15.	I am relaxed	1	2	3	4	5
16.	I feel content	1	2	3	4	5
17.	I am worried	1	2	3	4	5
18.	I feel over-excited and "rattled"	1	2	3	4	5
19.	I feel joyful	1	2	3	4	5
20.	I feel pleasant	1	2	3	4	5

1 = Not at all describe of me
2 = A little " " "
3 = Quite " " "
4 = Very " " "
5 = Extremely

SELF-EVALUATION QUESTIONNAIRE

Developed by C.D. Spielberger, R.L. Gorsuch and R. Lushene

STAI Form X-2

NAME DATE

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you generally feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

21.	I feel pleasant	1	2	3	4	5
22.	I tire quickly	1	2	3	4	5
23.	I feel like crying	1	2	3	4	5
24.	I wish I could be as happy as others seem to be	1	2	3	4	5
25.	I am losing out on things because I can't make up my mind soon enough	1	2	3	4	5
26.	I feel rested	1	2	3	4	5
27.	I am "calm, cool and collected"	1	2	3	4	5
28.	I feel that difficulteis are piling up so that I cannot overcome them	1	2	3	4	5
29.	I worry too much over something that really doesn't matter	1	2	3	4	5
30.	I am happy	1	2	3	4	5
31.	I am inclined to take things hard	1	2	3	4	5
32.	I lack self-confidence	1	2	3	4	5
33.	I feel secure	1	2	3	4	5
34.	I try to avoid facing a crisis or difficulty	1	2	3	4	5
35.	I feel blue	1	2	3	4	5
36.	I am content	1	2	3	4	5
37.	Some unimportant thought runs through my mind and bothers me	1	2	3	4	5
38.	I take disappointments so keenly that I can't put put them out of mind	1	2	3	4	5
39.	I am a steady person	1	2	3	4	5
40.	I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4	5

APPENDIX I (cont)

PLEASE INDICATE HOW YOU FEEL AT THIS MOMENT

	NOT AT ALL	SLIGHTLY SO	MODERATELY SO	VERY MUCH SO
CALM				
SECURE				
TENSE				
REGRETFUL				
AT EASE				
UPSET				
WORRYING ABOUT WHAT MAY GO WRONG				
RESTED				
ANXIOUS				
COMFORTABLE				
SELF-CONFIDENT				
NERVOUS				
JITTERY				
"STRUNG-UP"				
RELAXED				
CONTENT				
WORRIED				
OVER-EXCITED				
JOYFUL				
PLEASANT				

PLEASE INDICATE HOW YOU FEEL AT THIS MOMENT

	NOT AT ALL	SLIGHTLY SO	MODERATELY SO	VERY MUCH SO
CALM				
SECURE				
TENSE				
REGRETFUL				
AT EASE				
UPSET				
WORRYING ABOUT WHAT MAY GO WRONG				
RESTED				
ANXIOUS				
COMFORTABLE				
SELF-CONFIDENT				
NERVOUS				
JITTERY				
"STRUNG-UP"				
RELAXED				
CONTENT				
WORRIED				
OVER-EXCITED				
JOYFUL				
PLEASANT				

APPENDIX II

ANGER MANAGEMENT

Could you please complete the checklist below using information from the day/night report book to record incidents that occur during this week.

NAME: .....

.....

WEEK BEGINNING: .....

TYPE OF INCIDENT	NUMBER OF OCCURRENCES
[1] P.R.N. Medication	
[2] Seclusion	
[3] Physical aggression to others	
[4] Verbal aggression to others	
[5] Self injury	
[6] Temper tantrums	
[7] Destruction of property	

These categories are explained overleaf

PHYSICAL AGGRESSION

Uses threatening gestures

Spits

Pushes, scratches

Punches

Pulls hair/clothes

Bites

Kicks, strikes, slaps

Throws object at person

Chokes

Uses weapons against others

TEMPER TANTRUMS

Cries and screams

Stamps feet while banging objects

Stamps feet while screaming or yelling

Throws self on floor screaming or yelling

VERBAL AGGRESSION

Uses hostile language

Name calling

Swears, curses

Yells or screams threats of violence

Suggesting physical violence

DESTRUCTION OF PROPERTY

Rips, tears, chews clothing

Soils own property

Tears up own magazines, books or other possessions

Breaks window

Stuffs toilet with paper, towels or other soiled objects

Attempts to set fires

Rips others clothes

Soils others property

SELF INJURY

Bites or cuts self

Slaps or hits self

Bangs head or other part of the body against walls

Pulls own hair

Scratches or picks self

Soils/smears self

Pokes objects in eyes, ears, nose or mouth

APPENDIX III

DETAILS ABOUT YOURSELF

PLEASE ANSWER THE FOLLOWING QUESTIONS

ALL INFORMATION IS CONFIDENTIAL

AGE: ..... MARITAL STATUS: .....

DO YOU HAVE CHILDREN? ..... WHAT ARE THEIR AGES? .....

DO YOU LIVE ALONE? .....

WHAT IS YOUR POSITION IN THE PRISON SERVICE? .....

WHAT IS YOUR LENGTH OF TIME IN THE PRISON SERVICE? .....

HOW LONG HAVE YOU WORKED AT CORNTON VALE PRISON? .....

HOW LONG HAVE YOU WORKED IN THE PRESENT UNIT? .....

APPROXIMATELY, HOW MANY WORKDAYS DID YOU HAVE OFF SICK IN THE PAST 12 MONTHS? .....

HAVE YOU HAD ANY ILLNESSES IN THIS TIME? .....

DO YOU SMOKE? YES/NO HOW MUCH PER DAY? .....

DO YOU DRINK? YES/NO HOW MUCH PER DAY? .....

DO YOU HAVE MUCH TROUBLE GETTING TO SLEEP? .....

IF YOU DO, HAVE YOU ANY IDEA WHY? .....

.....

.....

IS THERE SOMEONE YOU CAN CONFIDE IN ABOUT ANY PERSONAL WORRIES? .....

.....

WHAT DO YOU ENJOY ABOUT YOUR WORK? .....

.....

.....

WHAT IS THE LEAST ENJOYABLE PART OF YOUR WORK? .....

.....

WHAT DO YOU THINK IS THE MOST STRESSFUL PART OF YOUR JOB? .....

.....

.....

WHAT ARE YOUR LEISURE ACTIVITIES? .....

.....

.....

HOW MANY HOURS PER WEEK DO YOU SPEND IN THESE ACTIVITIES? .....

.....

.....

Thank you very much for completing this questionnaire. When all the information has been collated it will be fed back to the Staff.

Please return forms to - Helen Liebling, Psychologist.

DATE: .....

APPENDIX IV

PERSONAL DATA SUMMARY

A. PRISON STAFF

GP = GROUP

Trouble getting to sleep	No Gp1	No Gp2	No Gp3	Yes Gp1	Yes Gp2	Yes Gp3
	6	4	7	9	8	5
	40%	33%	58.3%	60%	67%	41.6%

Most stressful part of the job:	Gp1		Gp2		Gp3	
Attempted suicides	5	33.3%	2	16%	0	0%
DTs/Alcohol withdrawal	3	20%	2	16%	0	0%
Paperwork	1	6%	0	0%	4.	33.3%
Self-injurious behaviour	4	26.6%	6	50%	0	0%
Disturbed inmates	8	53.3%	9	75%	2	16%
Difficult staff relationships	6	40%	5	46%	8	66.6%

What do you enjoy most about your work?	Gp1		Gp2		Gp3	
Helping others	6	40%	7	58.3%	9	75%
Variety of work	4	26.6%	3	25%	0	0%
Job satisfaction	8	53.3%	4	33.3%	3	25%
The challenge	9	60%	6	50%	5	41.6%
End of the shift	1	6%	1	8.3%	0	0%

What do you least enjoy about work?	Gp1		Gp2		Gp3	
Shifts	5	33.3%	4	33.3%	2	16%
Cleaning dirty cells	4	26.6%	5	41.6%	3	25%
Self-injurious behaviour	4	26.6%	7	58.3%	0	0%
Difficult staff relationships	6	40%	4	33.3%	9	75%
Being assaulted	1	6%	2	16%	0	0%
Paperwork	1	6%	0	0%	2	16%

APPENDIX V

PERSONAL DATA SUMMARY

B. HOSTEL STAFF

Trouble getting to sleep	No				Yes			
	Gp4		Gp5		Gp4		Gp5	
	3	33.3%	6	66.6%	6	60%	4	40%

Most stressful part of the job	Gp4		Gp5	
Lack of staff support	6	66.6%	3	30%
Verbal agression	2	22.2%	4	40%
Coping with disturbed residents/ families	4	44.4%	3	30%
Conflict between rules and therapy	4	44.4%	2	20%
Being on your own when in incident occurs	4	44.4%	0	0%
Relationships with committee members	1	11.1%	0	0%

What do you enjoy most about your work?	Gp4		Gp5	
Meeting people	2	22.2%	0	0%
Discussing problems	5	55.5%	3	30%
Helping others	7	77.7%	6	60%
One to one contact with residents	4	44.4%	0	0%
The challenge	2	22.2%	1	10%

What do you least enjoy about your work?	Gp4		Gp5	
Low morale in staff	6	66.6%	3	30%
Frustrating	3	33.3%	1	10%
Not being able to discuss incidents with other staff members	7	77.7%	2	20%
Rules	5	55.5%	1	10%
Confrontation with a resident	4	44.4%	3	30%
Violence	3	33.3%	4	40%
Not being able to motivate residents	1	11.1%	2	20%

NB: Staff members responded more than once to some questions, hence the responses total more than 100%

APPENDIX VI

STRESS MANAGEMENT SESSIONS

The weekly sessions covered the following areas:

1. What is stress?

   What do people think of as stress?
   What does stress mean? (Emphasise a combination of internal and external factors which influence behaviour.)

2. What things affect how well you cope with stress?

   i.e. health

3. Holmes-Rahe Rating Scale

   All the group fill in. To illustrate personal changes increases a person's vulnerability to stress and illness.

4. Contribution of lifestyle and behaviour

   Illustrating high, average and low stresses and how stress can arise from too much or absences of certain things.

5. Typical reactions to stress

   To illustrate a pattern to how we handle situations and this has implications for how we handle stress
   i.e. Type 'A' Executives - aggressive reaction which arouses a similar reaction in others. Often linked with Heart Disease.
   Type 'B' They get all the information, stop and think. They are unlikely to get a bad reaction from others.
   Type 'C' People who avoid situations and give up. Linked with problems of the Immune System.

6. Symptoms which occur under stress

   Including Somatic, Behavioural, Emotional Cognitive and Work-related.

7. What do you do to make you feel better?

   Short-term and long-term strategies.

8. Stresses in your life, strategies used and things you could change?

APPENDIX VI (cont)

9. Situations causing stress in a working group

10. Model of stress relating to organisations
    Cooper and Tarrington

    i.e. Factors intrinsic to the job
    Role in organisation
    Career development
    Relations within the organisation
    Being in the organisation
    Interface with the outside

11. Ways of handling problems

    Including a discussion of positive and negative ways in pairs.

12. Strategies for coping

    Effective and ineffective strategies.

13. Evaluation and feedback

Ms H. Liebling
Trainee Clinical Psychologist

Dr R. Hall
Principal Clinical Psychologist

APPENDIX VII

STRESS MANAGEMENT COURSE EVALUATION.

SESSIONS

1. Do you think the sessions were helpful

   a).For your personal life?

   No use at all — Very useful

   1 2 3 4 5

   b).As applied to your work at the Hostel?

   1 2 3 4 5

2. What aspects were particularly useful? Please list.

3. What aspects were least useful? Please list.

4. What did you learn from the sessions?

CONTENT OF THE SESSIONS.

	Not enough				Too much
Discussion of theory	1	2	3	4	5
Practical examples/exercises	1	2	3	4	5
Time allowance related to personal issues	1	2	3	4	5
Time allowance related to work issues	1	2	3	4	5

OTHER COMMENTS OR SUGGESTIONS.

Ms. H. Liebling

Dr. R. Hall

APPENDIX VIII

Feedback of Stress Management Evaluation **(9 staff)**

1. Do you think the sessions were helpful?

a) For your personal life

No use at all Very useful
1 2 3 4 5

6 staff responded number 2
3 staff responded number 3

b) As applied to your work at the hostel?

All staff responded: with number 3

2. Aspects which were particularly useful?	No of staff
A. Sessions pointed out the need to discuss issues more as a team	2
B. Discussing personal relationships	2
C. Sessions made me more aware of stress, and helped me cope with stress and develop more positive coping strategies	1
D. Sources of work stress	4

3. Aspects which were least useful

A. Discussions were too general

B. I would have liked to have looked at direct causes of stress i.e. shifts we work on our own.

APPENDIX VIII (cont)

4. What did you learn from the sessions?

A. An introduction to stress as ways of coping effectively with particular problems.

B. Looking for ways of working more effectively with our organisation.

C. As a staff team, we do not discuss issues easily, if we could this would be beneficial.

CONTENT OF THE SESSIONS

Staff were in agreement that time allowance and discussion of theory was given enough time. All staff would have preferred more practical exercises.

Suggestions

A. Staff would prefer to discuss issues in more detail about their job and would therefore feel it necessary for the person running the stress management sessions to have evaluated the particular problems of the place before commencing the stress management.

B. Staff generally found it difficult to discuss personal issues.

C. Matters related to staff communication could have been usefully addressed in more detail.

APPENDIX IX

Please complete the enclosed forms:

ALL INFORMATION IS CONFIDENTIAL

1. Self-evaluation questionnaire - to be completed at any time, indicate how you feel.

2. Other forms to be completed daily - one, when you start each shift and one when you finish. Indicate how you feel at those times.

I will collect the forms when completed.

If you have any questions please contact me at the Douglas Inch Centre, Tel: 332 3844, Ext. 47.

Thank you very much, results will be fed back to staff as soon as possible.

Ms Helen Liebling
Psychologist

APPENDIX IX (cont)

ALL INFORMATION IS CONFIDENTIAL

Please fill in the enclosed forms.

A letter has been assigned to each staff member so details cannot be identified by name. Please remember your letter and keep all forms together.

You will find some forms in pairs. These are for you to fill in daily at the start of each shift and the end of each shift. Tick the box which most closely fits your mood at the time. Please indicate on the back of the form if anything happens which has particularly annoyed or worried you in that shift.

Please continue to complete the forms for 10 days commencing Friday 8th December.

I will collect the personal details forms on Friday 8th December and the other forms at the end of the 10 day period.

If there are any problems or questions please contact me or Roisin Hall on Ext 214.

Thank you very much for your co-operation - the results will be fed back as soon as possible.

Helen Liebling
Psychologist

4th December 1989

APPENDIX X
NUMBER AND TYPE OF INCIDENTS PER DAY FOR PRISON GROUPS 1-3

Day	No of Incidents		
	Gp 1	Gp 2	Gp 3
1	3	2	0
2	5	3	0
3	2	4	0
4	4	5	0
5	5	5	0
6	5	6	0
7	4	5	0
8	6	4	0
9	2	6	0
10	8	8	0
Total	44	48	0

TYPE OF INCIDENTS OVER 10 DAY PERIOD

Type of Incident	Number of Incidents	
	Gp 1	Gp 2
Seclusion	* 15	*10
Physical aggression	7	8
Verbal aggression	6	8
Temper tantrums	6	4
Destruction of property	3	8
Self-injury	7	10
Total	44	48

* Illustrates the most frequent incidents during the 10 day period

APPENDIX X (cont)

NUMBER AND TYPE OF INCIDENTS PER DAY FOR HOSTEL GROUPS 4 AND 5

Day	Number of Incidents Gp 4	Gp 5
1	0	1
2	4	1
3	2	1
4	1	1
5	1	1
6	0	2
7	0	1
8	-	1
9	-	1
10	-	1
Total	8	11

TYPE OF INCIDENTS OVER THE 7/10 DAY PERIOD

Type of Incident	Number of Incidents Gp 4	Gp 5
Seclusion	0	0
Physical aggression	0	1
Verbal aggression	2	4
Temper tantrums	* 4	* 5
Destruction of property	2	1
Self-injury	0	0
Total	8	11

* Illustrates the most frequent incidents during the 7/10 day period